

BTA Oil Producers

Eddy ,NM

20509 JV-P Ogden #1H

20509 JV-P Ogden #1H

Wellbore #1

Survey: MWD Survey

DDC Survey Report

03 November, 2009



DDC Survey Report



Company:	BTA Oil Producers	Local Coordinate Reference:	Well 20509 JV-P Ogden #1H
Project:	Eddy ,NM	TVD Reference:	WELL @ 3100.0usft (Original Well Elev)
Site:	20509 JV-P Ogden #1H	MD Reference:	WELL @ 3100.0usft (Original Well Elev)
Well:	20509 JV-P Ogden #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Eddy ,NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site: 20509 JV-P Ogden #1H					
Site Position:		Northings:	464,838.40 usft	Latitude:	32° 16' 39.913 N
From:	Map	Easting:	570,140.90 usft	Longitude:	104° 6' 22.975 W
Position Uncertainty:	0.0 usft	Slot Radius:	0 "	Grid Convergence:	0.12 °

Well:	20509 JV-P Ogden #1H					
Well Position	+N/-S	0.0 usft	Northing:	464,838.40 usft	Latitude:	32° 16' 39.913 N
	+E/-W	0.0 usft	Easting:	570,140.90 usft	Longitude:	104° 6' 22.975 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,084.0 usft	

Wellbore:	Wellbore #1				
Magnetics:	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	8/20/2009	8.04	60.20	48,802

Design:		Wellbore #1			
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	178.23	

Survey Program		Date: 11/3/2009		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
6,675.0	12,438.0	MWD Survey (Wellbore #1)		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Tie-In									
6,600.0	1.32	108.76	6,599.5	-36.2	1.4	36.3	0.00	0.00	0.00
6,675.0	12.10	194.30	6,673.9	-44.2	0.3	44.2	16.09	14.38	114.07
6,706.0	18.20	192.30	6,703.8	-52.1	-1.6	52.0	19.75	19.68	-6.45
6,738.0	22.70	197.20	6,733.8	-62.8	-4.4	62.7	15.03	14.06	15.31
6,770.0	26.90	195.70	6,762.9	-75.7	-8.2	75.4	13.27	13.13	-4.69
6,802.0	30.60	191.70	6,790.9	-90.7	-11.8	90.3	13.03	11.56	-12.50
6,833.0	34.40	184.90	6,817.1	-107.1	-14.2	106.6	16.99	12.26	-21.94
6,865.0	37.50	179.60	6,843.0	-125.9	-14.9	125.4	13.72	9.69	-16.56
6,893.0	40.30	177.80	6,864.8	-143.5	-14.5	142.9	10.78	10.00	-6.43
6,925.0	43.40	174.70	6,888.6	-164.8	-13.1	164.3	11.64	9.69	-9.69

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Survey Report



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Well:	20509 JV-P Ogden #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	-E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,957.0	47.10	170.80	6,911.1	-187.3	-10.2	186.9	14.44	11.56	-12.19
6,989.0	51.00	167.60	6,932.1	-211.0	-5.6	210.7	14.34	12.19	-10.00
7,020.0	54.10	166.10	6,951.0	-235.0	0.0	234.9	10.71	10.00	-4.84
7,052.0	55.60	165.80	6,969.4	-260.4	6.3	260.4	4.75	4.69	-0.94
7,084.0	56.80	168.00	6,987.2	-286.3	12.3	286.5	6.83	3.75	6.88
7,116.0	58.40	172.40	7,004.3	-312.9	16.9	313.2	12.64	5.00	13.75
7,148.0	62.50	176.80	7,020.1	-340.6	19.5	341.0	17.52	12.81	13.75
7,180.0	68.60	178.90	7,033.4	-369.7	20.6	370.1	19.98	19.06	6.56
7,212.0	75.20	179.40	7,043.3	-400.1	21.1	400.5	20.68	20.63	1.56
7,243.0	81.40	179.50	7,049.6	-430.4	21.3	430.8	20.00	20.00	0.32
7,275.0	82.10	179.10	7,054.2	-462.1	21.7	462.5	2.51	2.19	-1.25
7,306.0	82.20	179.10	7,058.4	-492.8	22.2	493.2	0.32	0.32	0.00
7,338.0	84.70	180.10	7,062.0	-524.6	22.4	525.0	8.41	7.81	3.13
7,370.0	85.90	180.00	7,064.7	-556.4	22.4	556.9	3.76	3.75	-0.31
7,402.0	85.40	179.10	7,067.1	-588.4	22.7	588.8	3.21	-1.56	-2.81
7,434.0	85.10	179.10	7,069.7	-620.2	23.2	620.7	0.94	-0.94	0.00
7,466.0	88.40	180.20	7,071.6	-652.2	23.4	652.6	10.87	10.31	3.44
7,498.0	90.80	180.30	7,071.8	-684.2	23.2	684.6	7.51	7.50	0.31
7,530.0	90.80	180.10	7,071.3	-716.2	23.1	716.5	0.62	0.00	-0.63
7,562.0	90.70	179.20	7,070.9	-748.2	23.3	748.5	2.83	-0.31	-2.81
7,594.0	90.20	179.30	7,070.7	-780.2	23.7	780.5	1.59	-1.56	0.31
7,626.0	90.10	179.20	7,070.6	-812.2	24.1	812.5	0.44	-0.31	-0.31
7,658.0	89.90	179.30	7,070.6	-844.2	24.6	844.5	0.70	-0.63	0.31
7,690.0	90.10	177.40	7,070.6	-876.1	25.5	876.5	5.97	0.63	-5.94
7,722.0	89.90	177.60	7,070.6	-908.1	26.9	908.5	0.88	-0.63	0.63
7,754.0	89.50	177.30	7,070.8	-940.1	28.3	940.5	1.56	-1.25	-0.94
7,786.0	89.50	177.00	7,071.0	-972.0	29.9	972.5	0.94	0.00	-0.94
7,818.0	90.40	176.60	7,071.1	-1,004.0	31.7	1,004.5	3.08	2.81	-1.25
7,849.0	90.20	177.00	7,070.9	-1,034.9	33.4	1,035.5	1.44	-0.65	1.29
7,881.0	90.40	176.90	7,070.7	-1,066.9	35.1	1,067.5	0.70	0.63	-0.31
7,913.0	90.20	176.90	7,070.6	-1,098.9	36.8	1,099.5	0.63	-0.63	0.00
7,945.0	90.10	176.50	7,070.5	-1,130.8	38.7	1,131.5	1.29	-0.31	-1.25
7,976.0	89.80	176.60	7,070.5	-1,161.7	40.5	1,162.4	1.02	-0.97	0.32
8,007.0	89.40	176.10	7,070.7	-1,192.7	42.5	1,193.4	2.07	-1.29	-1.61
8,039.0	89.10	176.10	7,071.1	-1,224.6	44.7	1,225.4	0.94	-0.94	0.00
8,071.0	89.40	178.50	7,071.6	-1,256.6	46.2	1,257.4	7.56	0.94	7.50
8,103.0	90.20	178.90	7,071.7	-1,288.6	46.9	1,289.4	2.80	2.50	1.25
8,135.0	90.20	179.50	7,071.6	-1,320.5	47.4	1,321.4	1.87	0.00	1.88
8,166.0	90.60	179.00	7,071.3	-1,351.5	47.8	1,352.4	2.07	1.29	-1.61
8,197.0	90.60	178.50	7,071.0	-1,382.5	48.5	1,383.4	1.61	0.00	-1.61
8,229.0	90.40	178.80	7,070.7	-1,414.5	49.2	1,415.4	1.13	-0.63	0.94
8,261.0	90.60	178.60	7,070.5	-1,446.5	49.9	1,447.4	0.88	0.63	-0.63
8,293.0	90.50	178.80	7,070.2	-1,478.5	50.7	1,479.4	0.70	-0.31	0.63

DDC
Survey Report



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Site	20509 JV-P Ogden #1H	MD Reference	WELL @ 3100.0usft (Original Well Elev)
Well	20509 JV-P Ogden #1H	North Reference	Grid
Wellbore	Wellbore #1	Survey Calculation Method	Minimum Curvature
Design	Wellbore #1	Database	EDM 5000.1 Single User Db.

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N-S (usft)	E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,325.0	90.60	178.40	7,069.8	-1,510.5	51.4	1,511.4	1.29	0.31	-1.25
8,356.0	90.50	178.60	7,069.5	-1,541.5	52.3	1,542.4	0.72	-0.32	0.65
8,388.0	90.40	178.30	7,069.3	-1,573.5	53.1	1,574.4	0.99	-0.31	-0.94
8,420.0	90.50	177.80	7,069.0	-1,605.4	54.2	1,606.4	1.59	0.31	-1.56
8,452.0	90.30	177.60	7,068.8	-1,637.4	55.5	1,638.4	0.88	-0.63	-0.63
8,484.0	89.90	177.30	7,068.8	-1,669.4	56.9	1,670.4	1.56	-1.25	-0.94
8,516.0	89.80	177.10	7,068.8	-1,701.4	58.5	1,702.3	0.70	-0.31	-0.63
8,547.0	89.80	177.10	7,069.0	-1,732.3	60.0	1,733.3	0.00	0.00	0.00
8,578.0	89.20	177.70	7,069.2	-1,763.3	61.5	1,764.3	2.74	-1.94	1.94
8,610.0	88.80	178.20	7,069.8	-1,795.3	62.6	1,796.3	2.00	-1.25	1.56
8,642.0	88.30	178.00	7,070.6	-1,827.2	63.7	1,828.3	1.68	-1.56	-0.63
8,674.0	88.10	178.00	7,071.6	-1,859.2	64.8	1,860.3	0.63	-0.63	0.00
8,706.0	88.80	178.20	7,072.5	-1,891.2	65.8	1,892.3	2.27	2.19	0.63
8,737.0	88.40	178.20	7,073.2	-1,922.1	66.8	1,923.3	1.29	-1.29	0.00
8,769.0	88.40	178.30	7,074.1	-1,954.1	67.8	1,955.3	0.31	0.00	0.31
8,801.0	88.30	177.90	7,075.0	-1,986.1	68.8	1,987.3	1.29	-0.31	-1.25
8,833.0	89.00	178.30	7,075.8	-2,018.1	69.9	2,019.2	2.52	2.19	1.25
8,864.0	88.80	178.10	7,076.4	-2,049.0	70.9	2,050.2	0.91	-0.65	-0.65
8,896.0	88.30	178.40	7,077.2	-2,081.0	71.9	2,082.2	1.82	-1.56	0.94
8,928.0	88.30	178.20	7,078.1	-2,113.0	72.8	2,114.2	0.62	0.00	-0.63
8,960.0	89.40	177.90	7,078.8	-2,145.0	73.9	2,146.2	3.56	3.44	-0.94
8,992.0	90.10	178.20	7,078.9	-2,176.9	75.0	2,178.2	2.38	2.19	0.94
9,024.0	90.10	178.00	7,078.9	-2,208.9	76.0	2,210.2	0.63	0.00	-0.63
9,055.0	89.80	178.20	7,078.9	-2,239.9	77.1	2,241.2	1.16	-0.97	0.65
9,086.0	89.50	178.10	7,079.1	-2,270.9	78.1	2,272.2	1.02	-0.97	-0.32
9,117.0	90.20	177.90	7,079.2	-2,301.9	79.2	2,303.2	2.35	2.26	-0.65
9,149.0	90.20	178.00	7,079.1	-2,333.8	80.3	2,335.2	0.31	0.00	0.31
9,181.0	90.20	177.90	7,078.9	-2,365.8	81.4	2,367.2	0.31	0.00	-0.31
9,213.0	90.10	177.80	7,078.9	-2,397.8	82.6	2,399.2	0.44	-0.31	-0.31
9,244.0	89.80	177.70	7,078.9	-2,428.8	83.9	2,430.2	1.02	-0.97	-0.32
9,276.0	89.80	177.60	7,079.0	-2,460.7	85.2	2,462.2	0.31	0.00	-0.31
9,308.0	90.00	177.50	7,079.1	-2,492.7	86.5	2,494.2	0.70	0.63	-0.31
9,339.0	89.80	177.90	7,079.1	-2,523.7	87.8	2,525.2	1.44	-0.65	1.29
9,371.0	89.70	177.60	7,079.3	-2,555.7	89.0	2,557.2	0.99	-0.31	-0.94
9,403.0	89.80	177.10	7,079.4	-2,587.6	90.5	2,589.2	1.59	0.31	-1.56
9,434.0	89.70	177.60	7,079.5	-2,618.6	92.0	2,620.2	1.64	-0.32	1.61
9,466.0	90.20	177.70	7,079.6	-2,650.6	93.3	2,652.2	1.59	1.56	0.31
9,498.0	90.10	177.60	7,079.5	-2,682.5	94.6	2,684.2	0.44	-0.31	-0.31
9,529.0	90.50	178.80	7,079.3	-2,713.5	95.6	2,715.2	4.08	1.29	3.87
9,561.0	90.10	178.70	7,079.1	-2,745.5	96.2	2,747.2	1.29	-1.25	-0.31
9,592.0	89.90	178.50	7,079.1	-2,776.5	97.0	2,778.2	0.91	-0.65	-0.65
9,624.0	89.90	178.30	7,079.2	-2,808.5	97.9	2,810.2	0.63	0.00	-0.63
9,656.0	90.00	177.80	7,079.2	-2,840.5	99.0	2,842.2	1.59	0.31	-1.56

DDC Survey Report



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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	PE/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,687.0	90.10	177.60	7,079.2	-2,871.5	100.2	2,873.2	0.72	0.32	-0.65	
9,719.0	90.30	177.60	7,079.1	-2,903.4	101.6	2,905.2	0.63	0.63	0.00	
9,751.0	90.40	177.20	7,078.9	-2,935.4	103.0	2,937.2	1.29	0.31	-1.25	
9,783.0	90.20	177.50	7,078.7	-2,967.4	104.5	2,969.2	1.13	-0.63	0.94	
9,814.0	90.60	178.00	7,078.5	-2,998.3	105.7	3,000.2	2.07	1.29	1.61	
9,846.0	90.30	177.30	7,078.3	-3,030.3	107.0	3,032.2	2.38	-0.94	-2.19	
9,878.0	90.20	177.60	7,078.1	-3,062.3	108.5	3,064.2	0.99	-0.31	0.94	
9,910.0	90.00	177.40	7,078.1	-3,094.2	109.9	3,096.2	0.88	-0.63	-0.63	
9,941.0	90.30	177.10	7,078.0	-3,125.2	111.3	3,127.2	1.37	0.97	-0.97	
9,973.0	90.50	177.60	7,077.8	-3,157.2	112.8	3,159.1	1.68	0.63	1.56	
10,005.0	90.30	179.40	7,077.5	-3,189.2	113.7	3,191.1	5.66	-0.63	5.63	
10,036.0	90.60	179.30	7,077.3	-3,220.2	114.0	3,222.1	1.02	0.97	-0.32	
10,068.0	90.70	179.50	7,076.9	-3,252.1	114.3	3,254.1	0.70	0.31	0.63	
10,100.0	90.90	179.50	7,076.5	-3,284.1	114.6	3,286.1	0.63	0.63	0.00	
10,132.0	90.30	179.80	7,076.1	-3,316.1	114.8	3,318.1	2.10	-1.88	0.94	
10,163.0	90.40	179.90	7,076.0	-3,347.1	114.9	3,349.1	0.46	0.32	0.32	
10,195.0	90.80	179.60	7,075.6	-3,379.1	115.0	3,381.1	1.56	1.25	-0.94	
10,227.0	90.80	179.80	7,075.2	-3,411.1	115.2	3,413.1	0.62	0.00	0.63	
10,259.0	90.90	179.40	7,074.7	-3,443.1	115.4	3,445.1	1.29	0.31	-1.25	
10,291.0	90.50	179.00	7,074.3	-3,475.1	115.9	3,477.0	1.77	-1.25	-1.25	
10,323.0	90.20	179.00	7,074.1	-3,507.1	116.4	3,509.0	0.94	-0.94	0.00	
10,354.0	90.10	178.30	7,074.0	-3,538.1	117.2	3,540.0	2.28	-0.32	-2.26	
10,386.0	90.20	178.60	7,073.9	-3,570.1	118.0	3,572.0	0.99	0.31	0.94	
10,418.0	90.20	178.60	7,073.8	-3,602.1	118.8	3,604.0	0.00	0.00	0.00	
10,450.0	90.20	178.40	7,073.7	-3,634.1	119.7	3,636.0	0.62	0.00	-0.63	
10,482.0	90.10	178.50	7,073.6	-3,666.1	120.5	3,668.0	0.44	-0.31	0.31	
10,513.0	90.10	178.20	7,073.6	-3,697.1	121.4	3,699.0	0.97	0.00	-0.97	
10,545.0	89.80	178.10	7,073.6	-3,729.0	122.4	3,731.0	0.99	-0.94	-0.31	
10,577.0	89.80	178.30	7,073.7	-3,761.0	123.4	3,763.0	0.62	0.00	0.63	
10,608.0	89.80	178.70	7,073.8	-3,792.0	124.3	3,794.0	1.29	0.00	1.29	
10,640.0	89.60	178.20	7,074.0	-3,824.0	125.1	3,826.0	1.68	-0.63	-1.56	
10,672.0	89.30	178.30	7,074.3	-3,856.0	126.1	3,858.0	0.99	-0.94	0.31	
10,704.0	89.60	178.30	7,074.6	-3,888.0	127.1	3,890.0	0.94	0.94	0.00	
10,736.0	89.50	178.00	7,074.9	-3,919.9	128.1	3,922.0	0.99	-0.31	-0.94	
10,768.0	89.30	177.70	7,075.2	-3,951.9	129.3	3,954.0	1.13	-0.63	-0.94	
10,800.0	89.30	177.60	7,075.6	-3,983.9	130.6	3,986.0	0.31	0.00	-0.31	
10,831.0	88.80	177.60	7,076.1	-4,014.9	131.9	4,017.0	1.61	-1.61	0.00	
10,863.0	88.60	177.80	7,076.8	-4,046.8	133.2	4,049.0	0.88	-0.63	0.63	
10,895.0	88.80	177.40	7,077.6	-4,078.8	134.5	4,081.0	1.40	0.63	-1.25	
10,926.0	88.70	177.50	7,078.2	-4,109.8	135.9	4,112.0	0.46	-0.32	0.32	
10,958.0	88.40	177.60	7,079.0	-4,141.7	137.3	4,144.0	0.99	-0.94	0.31	
10,990.0	89.40	177.60	7,079.7	-4,173.7	138.6	4,176.0	3.13	3.13	0.00	
11,022.0	89.80	177.30	7,079.9	-4,205.6	140.0	4,208.0	1.56	1.25	-0.94	
11,054.0	89.90	176.90	7,080.0	-4,237.6	141.6	4,240.0	1.29	0.31	-1.25	

DDC
Survey Report



Company:	BTA Oil Producers	Local Co-ordinate Reference:	Well 20509 JV-P Ogden #1H
Project:	Eddy ,NM	TVD Reference:	WELL @ 3100.0usft.(Original Well Elev)
Site:	20509 JV-P Ogden #1H	MDI Reference:	WELL @ 3100.0usft.(Original Well Elev)
Well:	20509 JV-P Ogden #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,085.0	90.50	177.20	7,079.9	-4,268.6	143.2	4,271.0	2.16	1.94	0.97
11,117.0	90.80	177.30	7,079.5	-4,300.5	144.8	4,302.9	0.99	0.94	0.31
11,149.0	90.60	177.30	7,079.1	-4,332.5	146.3	4,334.9	0.63	-0.63	0.00
11,181.0	90.90	177.30	7,078.7	-4,364.4	147.8	4,366.9	0.94	0.94	0.00
11,213.0	90.90	177.60	7,078.2	-4,396.4	149.2	4,398.9	0.94	0.00	0.94
11,244.0	90.10	177.60	7,077.9	-4,427.4	150.5	4,429.9	2.58	-2.58	0.00
11,276.0	89.90	177.00	7,077.9	-4,459.3	152.0	4,461.9	1.98	-0.63	-1.88
11,308.0	89.40	176.70	7,078.1	-4,491.3	153.8	4,493.9	1.82	-1.56	-0.94
11,340.0	89.30	176.50	7,078.5	-4,523.2	155.7	4,525.9	0.70	-0.31	-0.63
11,372.0	90.50	177.20	7,078.5	-4,555.2	157.4	4,557.9	4.34	3.75	2.19
11,404.0	90.90	178.20	7,078.1	-4,587.2	158.7	4,589.9	3.37	1.25	3.13
11,436.0	90.90	178.20	7,077.6	-4,619.1	159.7	4,621.9	0.00	0.00	0.00
11,467.0	91.00	178.20	7,077.1	-4,650.1	160.7	4,652.9	0.32	0.32	0.00
11,499.0	90.80	178.50	7,076.6	-4,682.1	161.6	4,684.9	1.13	-0.63	0.94
11,531.0	91.10	178.60	7,076.1	-4,714.1	162.4	4,716.9	0.99	0.94	0.31
11,562.0	91.10	178.60	7,075.5	-4,745.1	163.2	4,747.9	0.00	0.00	0.00
11,594.0	91.20	178.90	7,074.8	-4,777.1	163.9	4,779.8	0.99	0.31	0.94
11,626.0	91.20	178.60	7,074.2	-4,809.0	164.6	4,811.8	0.94	0.00	-0.94
11,658.0	91.20	178.40	7,073.5	-4,841.0	165.4	4,843.8	0.62	0.00	-0.63
11,690.0	91.10	178.70	7,072.9	-4,873.0	166.2	4,875.8	0.99	-0.31	0.94
11,721.0	90.90	178.40	7,072.3	-4,904.0	167.0	4,906.8	1.16	-0.65	-0.97
11,753.0	90.60	178.40	7,071.9	-4,936.0	167.9	4,938.8	0.94	-0.94	0.00
11,785.0	90.50	178.50	7,071.6	-4,968.0	168.8	4,970.8	0.44	-0.31	0.31
11,817.0	90.60	178.30	7,071.3	-5,000.0	169.7	5,002.8	0.70	0.31	-0.63
11,849.0	90.40	178.50	7,071.0	-5,031.9	170.6	5,034.8	0.88	-0.63	0.63
11,881.0	90.30	178.60	7,070.8	-5,063.9	171.4	5,066.8	0.44	-0.31	0.31
11,912.0	90.20	179.00	7,070.7	-5,094.9	172.0	5,097.8	1.33	-0.32	1.29
11,943.0	90.10	178.90	7,070.6	-5,125.9	172.6	5,128.8	0.46	-0.32	-0.32
11,975.0	89.90	178.90	7,070.6	-5,157.9	173.2	5,160.8	0.63	-0.63	0.00
12,006.0	90.00	179.00	7,070.6	-5,188.9	173.8	5,191.8	0.46	0.32	0.32
12,038.0	90.10	179.00	7,070.6	-5,220.9	174.3	5,223.8	0.31	0.31	0.00
12,070.0	90.20	179.20	7,070.5	-5,252.9	174.8	5,255.8	0.70	0.31	0.63
12,102.0	90.30	179.40	7,070.4	-5,284.9	175.2	5,287.8	0.70	0.31	0.63
12,134.0	90.30	179.50	7,070.2	-5,316.9	175.5	5,319.8	0.31	0.00	0.31
12,166.0	90.20	179.80	7,070.1	-5,348.9	175.7	5,351.8	0.99	-0.31	0.94
12,198.0	90.20	179.80	7,070.0	-5,380.9	175.8	5,383.8	0.00	0.00	0.00
12,230.0	90.10	180.10	7,069.9	-5,412.9	175.9	5,415.7	0.99	-0.31	0.94
12,262.0	90.20	180.00	7,069.8	-5,444.9	175.8	5,447.7	0.44	0.31	-0.31
12,293.0	90.40	180.40	7,069.6	-5,475.9	175.7	5,478.7	1.44	0.65	1.29
12,325.0	90.50	180.70	7,069.4	-5,507.9	175.4	5,510.7	0.99	0.31	0.94
12,357.0	90.40	180.60	7,069.1	-5,539.9	175.1	5,542.6	0.44	-0.31	-0.31
12,388.0	90.60	181.10	7,068.9	-5,570.9	174.6	5,573.6	1.74	0.65	1.61
12,438.0	90.60	181.10	7,068.3	-5,620.9	173.6	5,623.5	0.00	0.00	0.00

DDC
Survey Report



Company	BTA Oil Producers	Local Co-ordinate Reference	Well 20509 JV-P Ogden #1H
Project	Eddy, NM	TVD Reference	WELL @ 3100.0usft (Original Well Elev)
Site	20509 JV-P Ogden #1H	MD Reference	WELL @ 3100.0usft (Original Well Elev)
Well	20509 JV-P Ogden #1H	North Reference	Grid
Wellbore	Wellbore #1	Survey Calculation Method	Minimum Curvature
Design	Wellbore #1	Database	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		N/S (usft)	E/W (usft)	
6,600.0	6,599.5	-36.2	1.4	Tie-In
12,438.0	7,068.3	-5,620.9	173.6	TD

Checked By: _____	Approved By: _____	Date: _____
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47

500

FedEx *US Airbill*
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Number

8651 9440 8339

1 From Please print and press hard.Date 02/02/10 Sender's FedEx Account Number 1013-3770-7Sender's Name BTA OIL PRODUCERS Phone (432) 682-3753Company BTA OIL PRODUCERSAddress 104 S PECOS ST Dept./Floor/Suite/RoomCity MIDLAND State TX ZIP 79701-5099**2 Your Internal Billing Reference** 20509 Ogden #1HANA
First 34 characters will appear on invoice.**3 To**Recipient's Name BLM Phone (575) 887-6544Company BLMRecipient's Address 620 E Greene Street Dept./Floor/Suite/Room
We cannot deliver to P.O. boxes or P.O. ZIP codes.Address Carlsbad State NM ZIP 88220City Carlsbad State NM ZIP 88220

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4a Express Package Service☒ **FedEx Priority Overnight**
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.☐ **FedEx Standard Overnight**
Next business afternoon.* Saturday Delivery NOT available.**Packages up to 150 lbs.**☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.☐ **FedEx 2Day**
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx Envelope rate not available. Maximum charge, One-pound rate.☐ **FedEx Express Saver**
Third business day.* Saturday Delivery NOT available.

* To most locations.

4b Express Freight Service☐ **FedEx 1Day Freight***
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.☐ **FedEx 2Day Freight**
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.**Packages over 150 lbs.**☐ **FedEx 3Day Freight**
Third business day.** Saturday Delivery NOT available.

** To most locations.

5 Packaging☒ **FedEx Envelope***☐ **FedEx Pak***
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.☐ **FedEx Box**☐ **FedEx Tube**☐ **Other**

* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3

☐ **SATURDAY Delivery**
NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 2Day Freight.☐ **HOLD Weekday**
at FedEx Location
NOT Available for FedEx First Overnight.☐ **HOLD Saturday**
at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

☒ **No** ☐ **Yes**
One box must be checked. ☐ **Yes** as per attached Shipper's Declaration. ☐ **Yes** Shipper's Declaration not required.☐ **Dry Ice**
Dry Ice & UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ **Cargo Aircraft Only****7 Payment Bill to:**

Enter FedEx Acct. No. or Credit Card No. below.

☒ **Sender** ☐ **Recipient** ☐ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**
Acct. No. in Section 1 will be billed.

FedEx Acct. No.

Credit Card No.

Exp.

Date

Total Packages

Total Weight

Total Declared Value†

\$.00

†Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

8 Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.☐ **Direct Signature**
Someone at recipient's address may sign for delivery (no option).☐ **Indirect Signature**
If no one is available at recipient's address, someone at a neighboring address may sign for delivery (no option).

519

Rev. Date 10/06/09 Form #154279-01/09-2006 FedEx/PRINTED IN U.S.A./SRF

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Delivered Initiated Picked up In transit Delivered Delivered Signed for by: A.ONSUREZ									
<table border="0"> <tr> <td>Shipment Dates</td> <td>Destination</td> </tr> <tr> <td>Ship date ⓘ Feb 3, 2010</td> <td>CARLSBAD, NM</td> </tr> <tr> <td>Delivery date ⓘ Feb 4, 2010 10:59 AM</td> <td>Signature Proof of Delivery ⓘ</td> </tr> </table>		Shipment Dates	Destination	Ship date ⓘ Feb 3, 2010	CARLSBAD, NM	Delivery date ⓘ Feb 4, 2010 10:59 AM	Signature Proof of Delivery ⓘ		
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Delivery date ⓘ Feb 4, 2010 10:59 AM	Signature Proof of Delivery ⓘ								
Shipment Facts Service type Priority Overnight Reference 20109 OGDEN 1H									
Shipment Travel History Select time zone: Local Scan Time All shipment travel activity is displayed in local time for the location <table border="1"> <thead> <tr> <th>Date/Time</th> <th>Activity</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Feb 4, 2010 10:59 AM</td> <td>Delivered</td> <td>CARLSBAD, NM</td> <td></td> </tr> </tbody> </table>		Date/Time	Activity	Location	Details	Feb 4, 2010 10:59 AM	Delivered	CARLSBAD, NM	
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