

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 05 2015

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Yates Petroleum Corp.

Eddy County, NM(NAD83)

Blast "BLA" Federal

#2H

OH

Survey: MWD #1

Standard Survey Report

17 June, 2014



Wellplanning Survey Report

Company:	Yates Petroleum Corp	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County, NM(NAD83)	TVD Reference:	WELL @ 3267.5usft (Original Well Elev)
Site:	Blast "BLA" Federal	MD Reference:	WELL @ 3267.5usft (Original Well Elev)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM-5000.1 Single User Db

Project:	Eddy County, NM(NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Blast "BLA" Federal				
Site Position:		Northing:	375,502.50 usft	Latitude:	32° 1' 56.172 N
From:	Map	Easting:	581,529.60 usft	Longitude:	104° 12' 13.072 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.07 °

Well	#2H					
Well Position	+N/-S	0.0 usft	Northing:	375,502.50 usft	Latitude:	32° 1' 56.172 N
	+E/-W	0.0 usft	Easting:	581,529.60 usft	Longitude:	104° 12' 13.072 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,249.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	5/4/2014	7.51	59.83	48,145

Design:	OH				
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	276.85	

Survey Program		Date 6/17/2014		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
200.0	12,350.0	MWD #1 (OH)	MWD	MWD - Standard

Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.17	107.32	200.0	-0.1	0.3	-0.3	0.09	0.09	0.00
400.0	0.46	93.96	400.0	-0.2	1.4	-1.4	0.15	0.15	-6.68
487.0	0.80	251.60	487.0	-0.4	1.1	-1.2	1.42	0.39	181.20
575.0	1.10	274.50	575.0	-0.6	-0.3	0.2	0.54	0.34	26.02
745.0	1.50	298.80	745.9	0.6	-3.9	3.9	0.39	0.23	14.21
922.0	1.20	286.70	921.9	2.3	-7.7	7.9	0.23	-0.17	-6.88
1,079.0	0.70	315.30	1,078.9	3.4	-9.9	10.3	0.43	-0.32	18.22
1,267.0	0.60	48.70	1,266.9	4.9	-10.0	10.5	0.50	-0.05	49.68
1,455.0	2.40	82.40	1,454.8	6.1	-5.3	6.0	1.03	0.96	17.93



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Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)	
1,550.0	2.20	75.40	1,549.7	6.8	-1.6	2.4	0.36	-0.21	-7.37	
1,644.0	2.00	85.10	1,643.7	7.4	1.8	-0.9	0.43	-0.21	10.32	
1,738.0	1.80	103.30	1,737.6	7.2	4.8	-4.0	0.67	-0.21	19.36	
1,894.0	1.50	84.30	1,893.5	6.8	9.3	-8.4	0.40	-0.19	-12.18	
1,999.0	1.20	40.70	1,998.5	7.8	11.3	-10.3	0.99	-0.29	-41.52	
2,097.0	1.30	25.40	2,096.5	9.6	12.5	-11.3	0.35	0.10	-15.61	
2,190.0	1.60	335.10	2,189.5	11.7	12.4	-10.9	1.36	0.32	-54.09	
2,285.0	1.80	325.90	2,284.4	14.1	11.0	-9.2	0.36	0.21	-9.68	
2,379.0	1.20	281.70	2,378.4	15.6	9.2	-7.3	1.34	-0.64	-47.02	
2,568.0	1.30	265.10	2,567.3	15.8	5.1	-3.2	0.20	0.05	-8.78	
2,662.0	1.50	263.80	2,661.3	15.6	2.9	-1.0	0.22	0.21	-1.38	
2,756.0	1.50	263.20	2,755.3	15.3	0.4	1.4	0.02	0.00	-0.64	
2,850.0	1.50	261.40	2,849.3	14.9	-2.0	3.8	0.05	0.00	-1.91	
3,038.0	1.50	258.70	3,037.2	14.1	-6.9	8.5	0.04	0.00	-1.44	
3,226.0	1.60	256.40	3,225.1	13.0	-11.8	13.3	0.06	0.05	-1.22	
3,414.0	1.80	257.80	3,413.0	11.8	-17.3	18.6	0.11	0.11	0.74	
3,602.0	2.00	252.70	3,600.9	10.2	-23.3	24.3	0.14	0.11	-2.71	
3,696.0	2.90	258.30	3,694.8	9.2	-27.2	28.1	0.99	0.96	5.96	
3,884.0	3.30	243.60	3,882.6	5.8	-36.7	37.1	0.47	0.21	-7.82	
3,978.0	1.90	226.20	3,976.5	3.5	-40.2	40.4	1.69	-1.49	-18.51	
4,072.0	0.50	281.70	4,070.5	2.5	-41.8	41.8	1.77	-1.49	59.04	
4,166.0	0.60	270.30	4,164.5	2.6	-42.7	42.7	0.16	0.11	-12.13	
4,261.0	0.70	267.20	4,259.4	2.6	-43.7	43.7	0.11	0.11	-3.26	
4,355.0	0.80	265.40	4,353.4	2.5	-45.0	44.9	0.11	0.11	-1.91	
4,449.0	0.80	266.10	4,447.4	2.4	-46.3	46.2	0.01	0.00	0.74	
4,543.0	0.90	258.10	4,541.4	2.2	-47.7	47.6	0.16	0.11	-8.51	
4,637.0	1.00	253.80	4,635.4	1.8	-49.2	49.0	0.13	0.11	-4.57	
4,825.0	0.90	241.20	4,823.4	0.7	-52.0	51.7	0.12	-0.05	-6.70	
5,013.0	1.00	234.60	5,011.4	-1.0	-54.7	54.2	0.08	0.05	-3.51	
5,201.0	0.90	231.40	5,199.3	-2.9	-57.2	56.4	0.06	-0.05	-1.70	
5,390.0	1.00	222.20	5,388.3	-5.0	-59.4	58.4	0.10	0.05	-4.87	
5,578.0	1.30	230.20	5,576.3	-7.6	-62.2	60.8	0.18	0.16	4.26	
5,766.0	1.20	212.60	5,764.2	-10.6	-64.9	63.1	0.21	-0.05	-9.36	
5,954.0	1.50	185.40	5,952.2	-14.7	-66.2	63.9	0.37	0.16	-14.47	
6,143.0	1.10	190.30	6,141.1	-19.0	-66.7	64.0	0.22	-0.21	2.59	
6,331.0	1.50	181.60	6,329.1	-23.2	-67.1	63.9	0.24	0.21	-4.63	
6,519.0	1.10	252.00	6,517.0	-26.2	-68.9	65.3	0.82	-0.21	37.45	
6,707.0	1.20	148.30	6,705.0	-28.5	-69.6	65.7	0.96	0.05	-55.16	
6,895.0	2.20	160.20	6,893.9	-33.5	-67.3	62.8	0.56	0.53	6.30	
7,021.0	2.20	183.30	7,018.8	-38.2	-66.6	61.6	0.70	0.00	18.48	
7,040.0	2.30	186.00	7,037.8	-38.9	-66.7	61.6	0.77	0.53	14.21	
7,072.0	2.80	233.70	7,069.8	-40.0	-67.4	62.1	6.60	1.56	149.06	
7,103.0	6.90	271.10	7,100.7	-40.5	-69.9	64.5	16.04	13.23	120.65	
7,134.0	10.50	282.20	7,131.3	-39.8	-74.5	69.2	12.76	11.61	35.81	



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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)
7,166.0	14.90	291.00	7,162.5	-37.7	-81.2	76.1	14.98	13.75	27.50
7,197.0	18.40	290.30	7,192.2	-34.6	-89.5	84.7	11.31	11.29	-2.26
7,228.0	20.80	287.50	7,221.4	-31.3	-99.3	94.9	8.31	7.74	-9.03
7,260.0	22.80	284.10	7,251.1	-28.0	-110.8	106.6	7.39	6.25	-10.63
7,291.0	25.10	282.00	7,279.5	-25.2	-123.0	119.1	7.91	7.42	-6.77
7,322.0	27.70	280.60	7,307.2	-22.5	-136.5	132.9	8.62	8.39	-4.52
7,354.0	30.80	278.30	7,335.2	-20.0	-152.0	148.5	10.30	9.69	-7.19
7,385.0	33.80	277.40	7,361.4	-17.7	-168.4	165.1	9.80	9.68	-2.90
7,416.0	37.40	277.60	7,386.6	-15.3	-186.3	183.1	11.62	11.61	0.65
7,448.0	40.40	276.40	7,411.5	-12.9	-206.2	203.2	9.67	9.38	-3.75
7,479.0	44.10	276.70	7,434.4	-10.5	-226.9	224.0	11.95	11.94	0.97
7,510.0	47.80	277.40	7,456.0	-7.8	-249.0	246.3	12.05	11.94	2.26
7,542.0	51.40	277.80	7,476.7	-4.6	-273.2	270.7	11.29	11.25	1.25
7,573.0	54.80	277.60	7,495.3	-1.2	-297.7	295.5	10.98	10.97	-0.65
7,604.0	55.80	277.30	7,512.9	2.1	-323.0	320.9	3.32	3.23	-0.97
7,636.0	58.50	276.60	7,530.3	5.3	-349.7	347.8	8.64	8.44	-2.19
7,668.0	62.10	276.20	7,546.2	8.4	-377.3	375.6	11.30	11.25	-1.25
7,699.0	67.40	277.30	7,559.4	11.7	-405.1	403.6	17.40	17.10	3.55
7,731.0	73.30	279.00	7,570.1	16.0	-434.9	433.7	19.10	18.44	5.31
7,763.0	79.30	281.50	7,577.7	21.5	-465.5	464.8	20.23	18.75	7.81
7,801.0	84.60	284.80	7,583.0	30.1	-502.1	502.1	16.38	13.95	8.68
7,832.0	88.60	286.60	7,584.9	38.5	-531.9	532.7	14.14	12.90	5.81
7,864.0	91.30	287.60	7,584.9	47.9	-562.5	564.2	9.00	8.44	3.13
7,895.0	92.10	286.90	7,584.0	57.1	-592.1	594.7	3.43	2.58	-2.26
7,989.0	93.90	285.00	7,579.1	82.9	-682.3	687.4	2.78	1.91	-2.02
8,083.0	93.10	282.50	7,573.3	105.1	-773.5	780.5	2.79	-0.85	-2.66
8,178.0	92.60	279.70	7,568.6	123.4	-866.6	875.1	2.99	-0.53	-2.95
8,272.0	92.20	277.40	7,564.7	137.4	-959.4	969.0	2.48	-0.43	-2.45
8,366.0	91.50	276.20	7,561.6	148.5	-1,052.7	1,062.9	1.48	-0.74	-1.28
8,460.0	91.70	276.60	7,559.0	159.0	-1,146.1	1,156.9	0.48	0.21	0.43
8,554.0	92.20	276.90	7,555.8	170.0	-1,239.4	1,250.8	0.62	0.53	0.32
8,648.0	90.30	275.70	7,553.7	180.3	-1,332.8	1,344.8	2.39	-2.02	-1.28
8,742.0	90.80	276.90	7,552.8	190.6	-1,426.2	1,438.8	1.38	0.53	1.28
8,836.0	91.50	276.60	7,551.0	201.7	-1,519.6	1,532.8	0.81	0.74	-0.32
8,930.0	92.20	277.40	7,547.9	213.1	-1,612.8	1,626.7	1.13	0.74	0.85
9,024.0	92.00	276.00	7,544.5	224.1	-1,706.1	1,720.7	1.50	-0.21	-1.49
9,118.0	92.50	276.90	7,540.8	234.6	-1,799.4	1,814.6	1.09	0.53	0.96
9,212.0	92.70	277.10	7,536.5	246.1	-1,892.6	1,908.5	0.30	0.21	0.21
9,306.0	93.00	277.10	7,531.8	257.7	-1,985.8	2,002.4	0.32	0.32	0.00
9,400.0	92.70	275.50	7,527.2	268.0	-2,079.1	2,096.2	1.73	-0.32	-1.70
9,495.0	92.90	276.00	7,522.5	277.5	-2,173.5	2,191.1	0.57	0.21	0.53
9,589.0	93.30	276.20	7,517.5	287.5	-2,266.9	2,285.0	0.48	0.43	0.21
9,683.0	91.90	273.90	7,513.2	295.7	-2,360.4	2,378.8	2.86	-1.49	-2.45



Wellplanning Survey Report

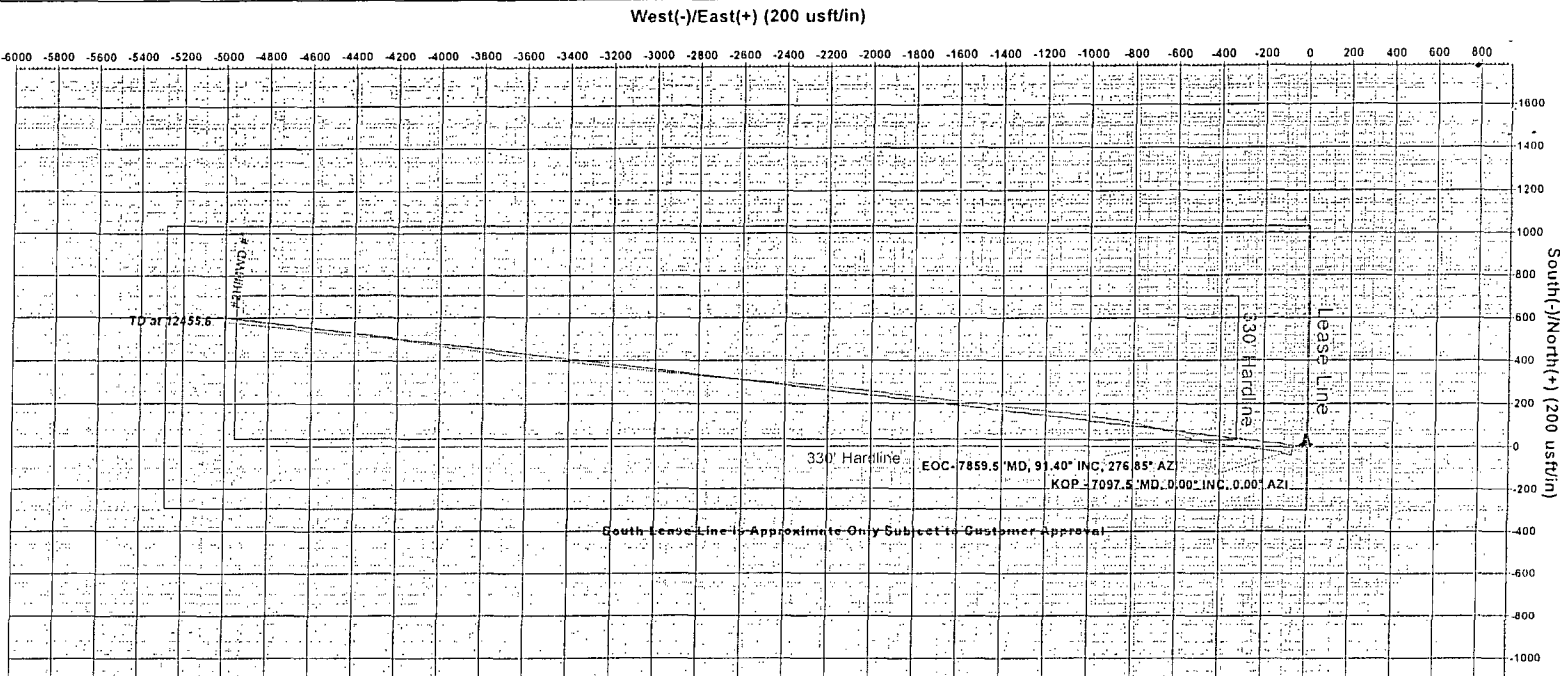
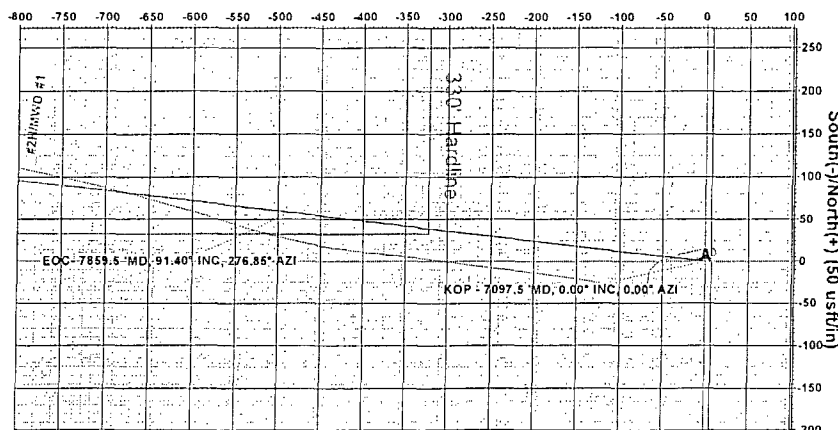
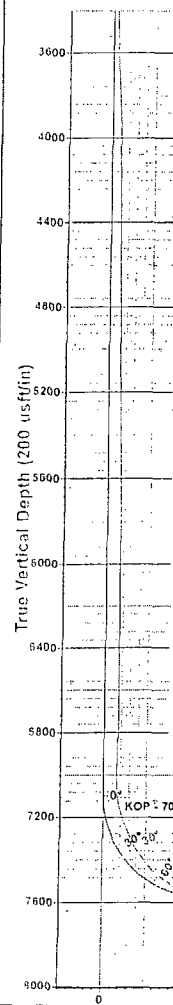
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9,777.0	92.80	274.30	7,509.3	302.5	-2,454.1	2,472.6	1.05	0.96	0.43
9,872.0	92.80	273.90	7,504.7	309.2	-2,548.7	2,567.4	0.42	0.00	-0.42
9,966.0	88.10	275.20	7,504.0	316.7	-2,642.4	2,661.3	5.19	-5.00	1.38
10,060.0	87.80	274.80	7,507.3	324.9	-2,736.0	2,755.2	0.53	-0.32	-0.43
10,154.0	87.40	275.70	7,511.3	333.5	-2,829.5	2,849.1	1.05	-0.43	0.96
10,248.0	87.80	275.70	7,515.2	342.8	-2,922.9	2,943.0	0.43	0.43	0.00
10,342.0	87.70	275.90	7,518.9	352.3	-3,016.4	3,036.9	0.24	-0.11	0.21
10,437.0	87.80	275.50	7,522.6	361.7	-3,110.8	3,131.8	0.43	0.11	-0.42
10,531.0	88.10	276.20	7,526.0	371.3	-3,204.3	3,225.7	0.81	0.32	0.74
10,625.0	88.50	276.60	7,528.8	381.8	-3,297.7	3,319.7	0.60	0.43	0.43
10,719.0	88.50	276.60	7,531.2	392.6	-3,391.0	3,413.6	0.00	0.00	0.00
10,813.0	88.70	276.40	7,533.5	403.2	-3,484.4	3,507.6	0.30	0.21	-0.21
10,907.0	89.80	276.60	7,534.7	413.9	-3,577.8	3,601.6	1.19	1.17	0.21
11,002.0	90.00	276.90	7,534.9	425.0	-3,672.1	3,696.6	0.38	0.21	0.32
11,096.0	90.50	277.10	7,534.5	436.5	-3,765.4	3,790.6	0.57	0.53	0.21
11,190.0	91.50	277.40	7,532.9	448.3	-3,858.6	3,884.6	1.11	1.06	0.32
11,284.0	91.70	278.80	7,530.2	461.6	-3,951.7	3,978.5	1.50	0.21	1.49
11,378.0	92.30	279.00	7,527.0	476.1	-4,044.5	4,072.4	0.67	0.64	0.21
11,472.0	93.50	278.00	7,522.2	490.0	-4,137.3	4,166.2	1.66	1.28	-1.06
11,566.0	93.40	276.40	7,516.5	501.7	-4,230.4	4,260.0	1.70	-0.11	-1.70
11,660.0	92.90	274.60	7,511.4	510.7	-4,323.8	4,353.9	1.98	-0.53	-1.91
11,755.0	90.90	274.30	7,508.2	518.1	-4,418.5	4,448.7	2.13	-2.11	-0.32
11,849.0	90.50	275.50	7,507.1	526.1	-4,512.1	4,542.7	1.35	-0.43	1.28
11,943.0	90.80	276.20	7,506.0	535.7	-4,605.6	4,636.6	0.81	0.32	0.74
12,037.0	91.10	276.90	7,504.5	546.4	-4,699.0	4,730.6	0.81	0.32	0.74
12,131.0	92.10	276.70	7,501.8	557.6	-4,792.3	4,824.6	1.08	1.06	-0.21
12,226.0	92.80	276.90	7,497.8	568.8	-4,886.5	4,919.5	0.77	0.74	0.21
12,289.0	93.30	276.90	7,494.4	576.4	-4,949.0	4,982.4	0.79	0.79	0.00
PBHL(BBF#2)									
12,350.0	93.30	276.90	7,490.9	583.7	-5,009.5	5,043.3	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____



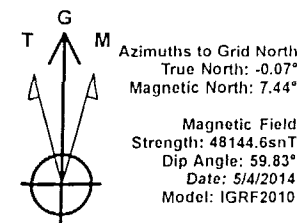
Project: Eddy County, NM(NAD83)
 Site: Blast "BLA" Federal
 Well: #2H
 Wellbore: OH
 Plan: Design #1 (#2H/OH)



#2H
 Ground Elevation:: 3249.0
 RKB Elevation: WELL @ 3267.5usft (Original Well Elev)
 Rig Name: Original Well Elev

Longitude	Northing	Easting	Latitude
375502.50	581529.60	32° 1' 56.172 N	104° 12' 13.072 W

Section Details									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	7097.5	0.00	0.00	7097.5	0.0	0.0	0.00	0.00	0.0
3	7859.5	91.40	276.85	7575.0	58.4	-485.8	12.00	276.85	489.3
4	12355.6	91.40	276.85	7465.2	594.5	-4948.5	0.00	0.00	4984.1 PBHL(BBF#2)
5	12455.6	91.40	276.85	7462.7	606.4	-5047.8	0.00	0.00	5084.0



Vertical Section at 276.85° (200 usft/in)

Terra Directional Services LLC
 322 Spring Hill Drive, Suite A300, Spring, Tx 77386
 Phone: 432-425-7532

PROJECT DETAILS: Eddy County, NM(NAD83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level
 Local North: Grid



Job Number: SVMO-140702
 Company: Yates Petroleum Corporation
 Lease/Well: Blast Bla Fed 2-H
 Location: Eddy County, NM
 Rig Name: McVay #8
 RKB: 18.5'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.46°
 Grid: East To Grid North
 File name: S:\2014SU-1\YATES\MO\BLASTB-1\2H.SVY
 Date/Time: 02-Jun-14 / 12:45
 Curve Name: Surface - 400' M.D. (Rate Gyro)

NM OIL CONSERVATION
 ARTESIA DISTRICT
 FEB 05 2015
 RECEIVED

MS SURVEY

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

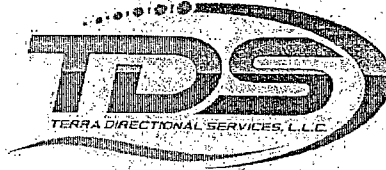
We hereby certify that our survey data from
Surface MD to 400' MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
Travis Pauk 6/2/14
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	.17	107.32	200.00	-.09	.28	-.09	.30	107.32	.08
Last Survey Depth Recorded									
400.00	.46	93.96	400.00	-.23	1.37	-.23	1.39	99.63	.15

NM OIL CONSERVATION
ARTESIA DISTRICT

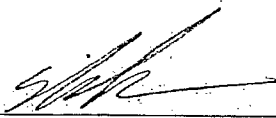
FEB 05 2015

RECEIVED



State of New Mexico
County of Eddy

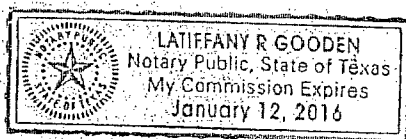
I, Michael K. Baber, certify that: I am employed by Terra Directional Services LLC; that I did on the day(s) of 05/28/2014 through 06/18/2014 conduct or supervise the taking of a MWD survey from a depth of 487 feet to a depth 12350 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Terra Directional Services LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of Yates Petroleum for the Blast BLA Federal #2H Well API 30-015-42146 in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Terra Directional Services LLC.

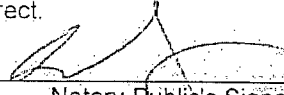

Michael K. Baber
MWD Operations Manager

State of Texas

County of Montgomery

Before me, a notary public, on this day personally appeared Michael K. Baber, known to me to be the person whose name is subscribed to the foregoing document and, being by me first duly sworn, declared that the statements therein contained are true and correct.




Notary Public's Signature

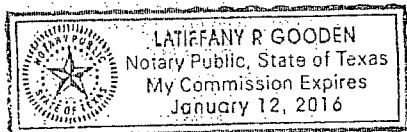


Customer Name: Yates Petroleum Corp
 Well Name: Blast BLA Federal #2H
 API Number: 30-015-42146
 County / Parish: Eddy County,
 NM
 Vertical Section: 276.85

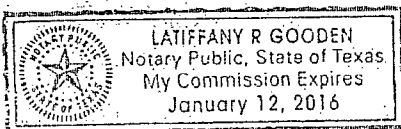
M.W.D. Operator: T. Gruelle
 Directional Driller: B. Nichols
 Total Magnetic Correction: 7.44
 Job #: NM-439

Tie In Survey(s) Provided By:

	Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	+N / -S	+E / -W	Dist.	Angle	DLS
Tie - In										
0	400.00	0.45	93.96	400.00	-0.23	-0.23	1.37	1.39	99.63	0.15
1	487.00	0.80	251.60	487.00	-1.19	-0.45	1.14	1.23	111.32	1.42
2	575.00	1.10	274.50	574.99	0.21	-0.57	-0.28	0.64	205.26	0.54
3	746.00	1.50	298.80	745.94	3.93	0.63	-3.88	3.93	279.27	0.39
4	922.00	1.20	286.70	921.89	7.88	2.27	-7.66	7.99	286.52	0.23
5	1079.00	0.70	315.30	1078.87	10.25	3.43	-9.91	10.49	289.07	0.43
6	1267.00	0.60	48.70	1266.86	10.49	4.89	-9.98	11.12	296.11	0.50
7	1455.00	2.40	82.40	1454.80	6.03	6.06	-5.34	8.08	318.63	1.03
8	1550.00	2.20	75.40	1549.72	2.40	6.79	-1.60	6.97	346.70	0.36
9	1644.00	2.00	85.10	1643.66	-0.88	7.38	1.78	7.59	13.53	0.43
10	1738.00	1.80	103.30	1737.60	-3.96	7.18	4.85	8.66	34.02	0.67
11	1894.00	1.50	84.30	1893.54	-8.38	6.82	9.26	11.50	53.64	0.40
12	1999.00	1.20	40.70	1998.51	-10.34	7.79	11.35	13.76	55.53	0.99
13	2097.00	1.30	25.40	2096.49	-11.26	9.57	12.49	15.74	52.54	0.35
14	2190.00	1.60	335.10	2189.47	-10.92	11.70	12.40	17.05	46.65	1.36
15	2285.00	1.80	325.90	2284.42	-9.24	14.14	11.00	17.92	37.89	0.36
16	2379.00	1.20	281.70	2378.39	-7.29	15.56	9.21	18.09	30.62	1.34
17	2568.00	1.30	265.10	2567.35	-3.22	15.78	5.14	16.60	18.04	0.20
18	2662.00	1.50	263.80	2661.32	-0.98	15.56	2.85	15.82	10.39	0.22
19	2756.00	1.50	263.20	2755.29	1.42	15.28	0.41	15.29	1.53	0.02
20	2850.00	1.50	261.40	2849.26	3.80	14.95	-2.03	15.09	352.27	0.05
21	3038.00	1.50	258.70	3037.19	8.51	14.10	-6.88	15.69	334.01	0.04
22	3226.00	1.60	256.40	3225.12	13.31	13.00	-11.84	17.58	317.68	0.06
23	3414.00	1.80	257.80	3413.04	18.56	11.76	-17.28	20.90	304.24	0.11
24	3602.00	2.00	252.70	3600.94	24.34	10.16	-23.29	25.41	293.57	0.14
25	3696.00	2.90	258.30	3694.85	28.09	9.19	-27.19	28.70	288.68	0.99
26	3884.00	3.30	243.60	3882.58	37.12	5.82	-36.69	37.15	279.01	0.47
27	3978.00	1.90	226.20	3976.48	40.38	3.54	-40.24	40.40	275.02	1.69
28	4072.00	0.50	281.70	4070.46	41.77	2.54	-41.77	41.84	273.48	1.77
29	4166.00	0.60	270.30	4164.46	42.67	2.63	-42.66	42.74	273.53	0.16
30	4261.00	0.70	267.20	4259.45	43.74	2.60	-43.74	43.82	273.41	0.11
31	4355.00	0.80	265.40	4353.44	44.95	2.52	-44.97	45.04	273.21	0.11
32	4449.00	0.80	266.10	4447.43	46.23	2.42	-46.27	46.34	273.00	0.01
33	4543.00	0.90	258.10	4541.42	47.58	2.23	-47.65	47.70	272.68	0.16
34	4637.00	1.00	253.80	4635.41	49.03	1.85	-49.16	49.20	272.15	0.13
35	4825.00	0.90	241.20	4823.38	51.74	0.68	-52.03	52.04	270.75	0.12
36	5013.00	1.00	234.60	5011.36	54.15	-0.98	-54.66	54.67	268.97	0.08
37	5201.00	0.90	231.40	5199.33	56.40	-2.86	-57.15	57.22	267.14	0.06
38	5390.00	1.00	222.20	5388.31	58.40	-5.00	-59.42	59.63	265.19	0.10
39	5578.00	1.30	230.20	5576.27	60.81	-7.58	-62.16	62.62	263.04	0.18
40	5766.00	1.20	212.60	5764.22	63.13	-10.61	-64.86	65.72	260.71	0.21
41	5954.00	1.50	185.40	5952.17	63.93	-14.72	-66.15	67.77	257.46	0.37
42	6143.00	1.10	190.30	6141.12	63.97	-18.96	-66.71	69.35	254.13	0.22
43	6331.00	1.50	181.60	6329.08	63.86	-23.20	-67.10	71.00	250.93	0.24
44	6519.00	1.10	252.00	6517.04	65.27	-26.22	-68.89	73.71	249.17	0.82



45	6707.00	1.20	148.30	6705.01	65.68	-28.45	-69.57	75.16	247.76	0.96
46	6896.00	2.20	160.20	6893.93	62.82	-33.55	-67.30	75.20	243.51	0.56
47	7021.00	2.20	183.30	7018.84	61.59	-38.20	-66.62	76.80	240.17	0.70
48	7040.00	2.30	186.00	7037.83	61.57	-38.94	-66.69	77.22	239.72	0.77
49	7072.00	2.80	233.70	7069.80	62.13	-40.04	-67.38	78.38	239.28	6.60
49	7103.00	6.90	271.10	7100.69	64.53	-40.46	-69.86	80.73	239.92	16.04
50	7134.00	10.50	282.20	7131.33	69.20	-39.82	-74.48	84.46	241.87	12.76
51	7166.00	14.90	291.00	7162.54	76.10	-37.73	-81.18	89.52	245.07	14.98
52	7197.00	18.40	290.30	7192.23	84.72	-34.60	-89.49	95.95	248.86	11.31
53	7228.00	20.80	287.50	7221.44	94.89	-31.25	-99.33	104.13	252.53	8.31
54	7260.00	22.80	284.10	7251.15	106.63	-28.03	-110.76	114.25	255.80	7.39
55	7291.00	25.10	282.00	7279.48	119.14	-25.20	-123.02	125.57	258.42	7.91
56	7322.00	27.70	280.60	7307.24	132.88	-22.51	-136.54	138.38	260.64	8.62
57	7354.00	30.80	278.30	7335.16	148.49	-19.96	-151.96	153.26	262.52	10.30
58	7385.00	33.80	277.40	7361.36	165.05	-17.70	-168.37	169.29	264.00	9.80
59	7416.00	37.40	277.60	7386.56	183.09	-15.34	-186.25	186.89	265.29	11.62
60	7448.00	40.40	276.40	7411.46	203.19	-12.90	-206.20	206.60	266.42	9.67
61	7479.00	44.10	276.70	7434.41	224.03	-10.52	-226.90	227.14	267.34	11.95
62	7510.00	47.80	277.40	7455.96	246.30	-7.78	-249.01	249.13	268.21	12.05
63	7542.00	51.40	277.80	7476.69	270.67	-4.56	-273.16	273.20	269.04	11.29
64	7573.00	54.80	277.60	7495.30	295.45	-1.24	-297.72	297.72	269.76	10.98
65	7604.00	55.80	277.30	7512.95	320.93	2.06	-322.99	323.00	270.37	3.32
66	7636.00	58.50	276.60	7530.31	347.81	5.31	-349.68	349.72	270.87	8.64
67	7668.00	62.10	276.20	7546.16	375.60	8.41	-377.29	377.39	271.28	11.30
68	7699.00	67.40	277.30	7559.38	403.63	11.71	-405.13	405.30	271.66	17.40
69	7731.00	73.30	279.00	7570.13	433.75	15.99	-434.94	435.24	272.11	19.10
70	7763.00	79.30	281.50	7577.71	464.76	21.53	-465.52	466.02	272.65	20.23
71	7801.00	84.60	284.80	7583.03	502.14	30.09	-502.14	503.04	273.43	16.38
72	7832.00	88.60	286.60	7584.87	532.71	38.46	-531.92	533.31	274.14	14.14
73	7864.00	91.30	287.60	7584.90	564.20	47.87	-562.50	564.54	274.86	9.00
74	7895.00	92.10	286.90	7583.98	594.67	57.06	-592.10	594.84	275.50	3.43
75	7989.00	93.90	285.00	7579.06	687.36	82.85	-682.34	687.36	276.92	2.78
76	8083.00	93.10	282.50	7573.32	780.49	105.15	-773.47	780.59	277.74	2.79
77	8178.00	92.60	279.70	7568.60	875.10	123.42	-866.57	875.31	278.11	2.99
78	8272.00	92.20	277.40	7564.66	968.97	137.38	-959.44	969.22	278.15	2.48
79	8366.00	91.50	276.20	7561.62	1062.92	148.50	-1052.73	1063.15	278.03	1.48
80	8460.00	91.70	276.60	7559.00	1156.88	158.98	-1146.10	1157.08	277.90	0.48
81	8554.00	92.20	276.90	7555.80	1250.83	170.02	-1239.40	1251.00	277.81	0.62
82	8648.00	90.30	275.70	7553.75	1344.80	180.33	-1332.80	1344.95	277.71	2.39
83	8742.00	90.80	276.90	7552.85	1438.78	190.64	-1426.23	1438.91	277.61	1.38
84	8836.00	91.50	276.60	7550.96	1532.77	201.69	-1519.56	1532.88	277.56	0.81
85	8930.00	92.20	277.40	7547.93	1626.71	213.14	-1612.81	1626.83	277.53	1.13
86	9024.00	92.00	276.00	7544.48	1720.65	224.10	-1706.10	1720.75	277.48	1.50
87	9118.00	92.50	276.90	7540.79	1814.57	234.65	-1799.43	1814.67	277.43	1.09
88	9212.00	92.70	277.10	7536.53	1908.48	246.09	-1892.63	1908.57	277.41	0.30
89	9306.00	93.00	277.10	7531.85	2002.36	257.70	-1985.80	2002.45	277.39	0.32
90	9400.00	92.70	275.50	7527.18	2096.23	268.00	-2079.11	2096.31	277.34	1.73
91	9495.00	92.90	276.00	7522.54	2191.10	277.51	-2173.52	2191.16	277.28	0.57
92	9589.00	93.30	276.20	7517.46	2284.96	287.48	-2266.85	2285.01	277.23	0.48
93	9683.00	91.90	273.90	7513.19	2378.81	295.74	-2360.38	2378.84	277.14	2.86
94	9777.00	92.80	274.30	7509.34	2472.62	302.46	-2454.06	2472.63	277.03	1.05
95	9872.00	92.80	273.90	7504.70	2567.39	309.24	-2548.70	2567.40	276.92	0.42
96	9966.00	88.10	275.20	7503.96	2661.29	316.70	-2642.38	2661.29	276.83	5.19
97	10060.00	87.80	274.80	7507.32	2755.18	324.89	-2735.96	2755.18	276.77	0.53
98	10154.00	87.40	275.70	7511.26	2849.06	333.48	-2829.48	2849.06	276.72	1.05
99	10248.00	87.80	275.70	7515.19	2942.96	342.81	-2922.93	2942.97	276.69	0.43
100	10342.00	87.70	275.90	7518.88	3036.87	352.30	-3016.38	3036.88	276.66	0.24
101	10437.00	87.80	275.50	7522.61	3131.78	361.73	-3110.84	3131.80	276.63	0.43



102	10531.00	88.10	276.20	7525.98	3225.70	371.30	-3204.29	3225.73	276.61	0.81
103	10625.00	88.50	276.60	7528.76	3319.66	381.78	-3297.66	3319.69	276.60	0.60
104	10719.00	88.50	276.60	7531.22	3413.62	392.58	-3391.01	3413.65	276.60	0.00
105	10813.00	88.70	276.40	7533.52	3507.59	403.21	-3484.37	3507.63	276.60	0.30
106	10907.00	89.80	276.60	7534.75	3601.58	413.85	-3577.76	3601.62	276.60	1.19
107	11002.00	90.00	276.90	7534.92	3696.58	425.02	-3672.10	3696.62	276.60	0.38
108	11096.00	90.50	277.10	7534.51	3790.58	436.48	-3765.40	3790.61	276.61	0.57
109	11190.00	91.50	277.40	7532.87	3884.56	448.34	-3858.63	3884.59	276.63	1.11
110	11284.00	91.70	278.80	7530.24	3978.50	461.58	-3951.66	3978.52	276.66	1.50
111	11378.00	92.30	279.00	7526.96	4072.38	476.11	-4044.47	4072.39	276.71	0.67
112	11472.00	93.50	278.00	7522.21	4166.22	489.99	-4137.31	4166.23	276.75	1.66
113	11566.00	93.40	276.40	7516.55	4260.04	501.74	-4230.40	4260.05	276.76	1.70
114	11660.00	92.90	274.60	7511.38	4353.87	510.74	-4323.82	4353.88	276.74	1.98
115	11755.00	90.90	274.30	7508.23	4448.73	518.11	-4418.48	4448.75	276.69	2.13
116	11849.00	90.50	275.50	7507.08	4542.67	526.13	-4512.12	4542.70	276.65	1.35
117	11943.00	90.80	276.20	7506.02	4636.65	535.71	-4605.63	4636.68	276.63	0.81
118	12037.00	91.10	276.90	7504.46	4730.63	546.44	-4699.00	4730.67	276.63	0.81
119	12131.00	92.10	276.70	7501.84	4824.59	557.56	-4792.30	4824.63	276.64	1.08
120	12226.00	92.80	276.90	7497.77	4919.51	568.80	-4886.55	4919.54	276.64	0.77
121	12289.00	93.30	276.90	7494.42	4982.42	576.36	-4949.00	4982.45	276.64	0.79
122	12350.00	93.30	276.90	7490.91	5043.32	583.67	-5009.46	5043.35	276.65	0.00



**McVAY DRILLING COMPANY**

P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

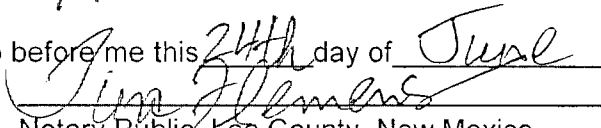
Well Name and Num: Blast BLA Federal #2H
Location: Sec 20, T26S, R27E
Operator: Yates
Drilling Contractor: McVay Drilling Company

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
0.50	192	1.00	5390	88.10	10531
0.35	327	1.20	5766	89.70	10907
1.10	575	1.10	6143	91.50	11190
1.50	746	1.50	6331	91.70	11284
1.20	922	1.20	6707	93.40	11566
0.70	1079	2.20	7025	90.80	11943
2.20	1550	27.70	7322	91.10	12037
1.80	1738	51.40	7542	93.30	12289
1.20	1999	58.50	7636		
1.30	2097	67.40	7699		
1.20	2473	84.60	7801		
1.50	2756	92.60	8178		
1.60	3226	92.20	8272		
2.90	3696	90.80	8742		
0.50	4072	92.70	9212		
0.90	4543	91.90	9683		
1.00	5073	87.40	10154		

By: 

Subscribed and sworn to before me this 24th day of June, 2014


Notary Public, Lea County, New Mexico

