

30-015-35690



**TANK 29 FEDERAL #2
EDDY COUNTY, NEW MEXICO**



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	9100.00	2.81	243.13	9095.58	-92.75	-57.14	0.00	0.00	59.93	
2	9115.00	4.01	270.77	9110.55	-92.91	-57.99	13.33	68.25	60.79	
3	9120.00	4.01	270.77	9115.54	-92.90	-58.34	0.00	0.00	61.14	
4	9548.27	94.79	270.77	9366.00	-88.99	-350.51	21.20	-0.01	353.05	
5	11344.19	94.79	270.77	9216.00	-65.00	-2140.00	0.00	0.00	2140.99	P4

WELL DETAILS							
Name +N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
#2	0.00	0.00	402436.40	547702.90	32°06'22.943N	104°18'46.004W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
P4	9216.00	-65.00	-2140.00	402371.40	545562.90	Point

LEGEND

== #2,1,Plan #4
WFT SVY

SITE DETAILS

Tank 29 Federal #2
660' FNL 2480' FEL of SEC 29, T-25-S, R-26-E

Site Centre Northing: 402436.40
Easting: 547702.90

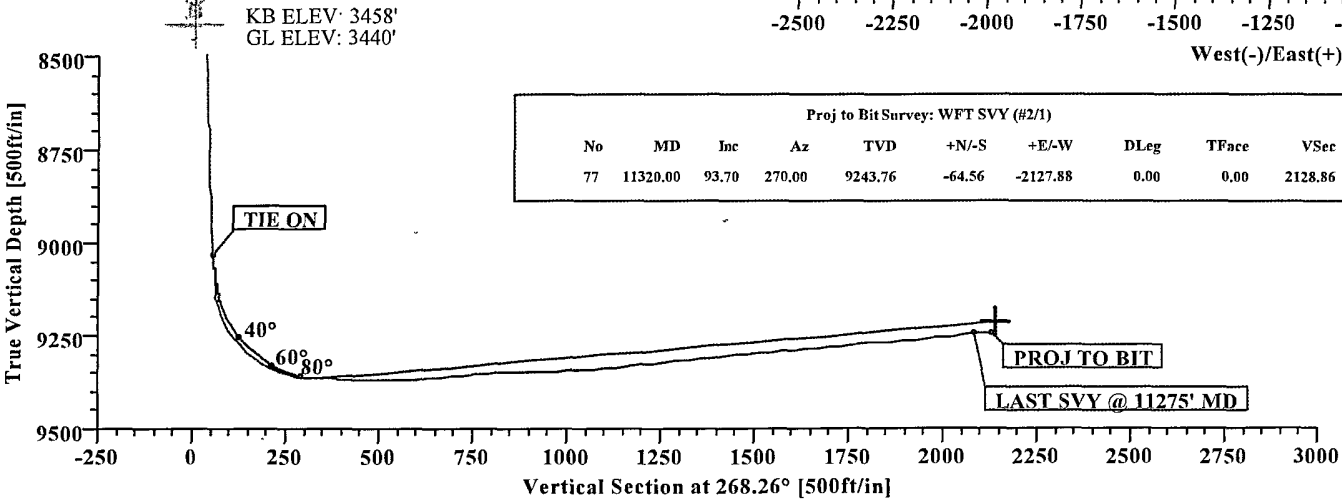
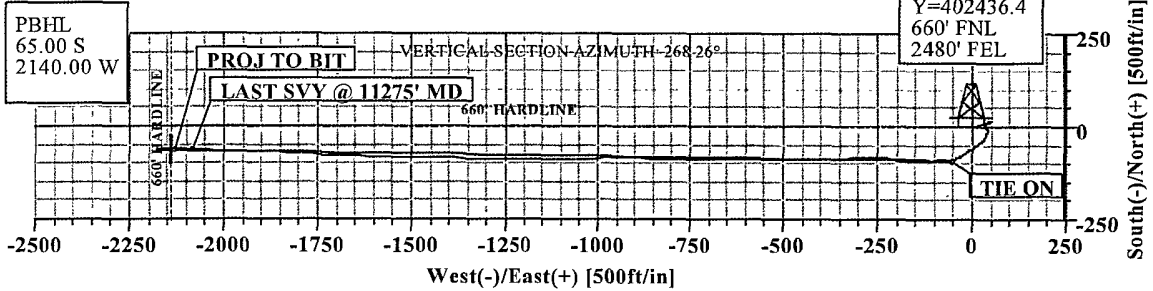
Ground Level: 3440.00
Positional Uncertainty: 0.00
Convergence: 0.01

FIELD DETAILS

Eddy Co., NM (NAD 83)

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: bggm2007

System Datum: Mean Sea Level
Local North: Grid North



Proj to Bit Survey: WFT SVY (#2/1)										
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
77	11320.00	93.70	270.00	9243.76	-64.56	-2127.88	0.00	0.00	2128.86	

Azimuths to Grid North

True North: -0.01°
Magnetic North: 8.28°

Magnetic Field

Strength: 48782nT
Dip Angle: 60.01°
Date: 8/14/2008
Model: bggm2007
TOTAL CORRECTION TO GRID NORTH 8.28°

Weatherford International, Inc.

Survey Report

Company: Cimarex	Date: 9/29/2008	Time: 09:02:30	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: #2, Grid North		
Site: Tank 29 Federal #2	Vertical (TVD) Reference: SITE 3458.0		
Well: #2	Section (VS) Reference: Well (0.00N,0.00E,268.26Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Field: Eddy Co., NM (NAD 83)

Map System: US State Plane Coordinate System 1983	Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: bggm2007

Site: Tank 29 Federal #2

660' FNL 2480' FEL of SEC 29, T-25-S, R-26-E

Site Position:	Northing: 402436.40 ft	Latitude: 32 6 22.943 N
From: Map	Easting: 547702.90 ft	Longitude: 104 18 46.004 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3440.00 ft		Grid Convergence: 0.01 deg

Well: #2	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 402436.40 ft
+E/-W 0.00 ft	Easting: 547702.90 ft
Position Uncertainty: 0.00 ft	Latitude: 32 6 22.943 N
	Longitude: 104 18 46.004 W

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 8/14/2008	Above System Datum: Mean Sea Level
Field Strength: 48782 nT	Declination: 8.29 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.01 deg
ft	+N/-S
	ft
0.00	0.00
	ft
	+E/-W
	ft
	Direction
	deg
	0.00
	268.26

Survey: WFT SVY	Start Date: 9/18/2008
Company: Weatherford International, Inc	Engineer: Lindsey Maddux
Tool: MWD;MWD - Standard	Tied-to: From: GYRO

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
9033.63	2.66	242.00	9029.28	-91.29	-54.33	57.08	0.00	0.00	0.00	TIE ON
9165.00	14.50	281.30	9159.01	-89.49	-73.22	75.91	9.56	9.02	29.92	MWD
9210.00	27.00	260.20	9201.06	-90.13	-88.90	91.59	31.95	27.78	-46.89	MWD
9242.00	34.30	266.90	9228.58	-91.86	-105.08	107.82	25.15	22.81	20.94	MWD
9274.00	39.90	279.00	9254.13	-90.74	-124.26	126.96	28.68	17.50	37.81	MWD
9313.00	45.20	273.50	9282.86	-87.93	-150.46	153.06	16.59	13.59	-14.10	MWD
9344.00	50.00	272.00	9303.75	-86.85	-173.32	175.87	15.89	15.48	-4.84	MWD
9359.00	52.00	270.40	9313.19	-86.60	-184.97	187.51	15.70	13.33	-10.67	MWD
9376.00	56.50	271.10	9323.12	-86.42	-198.76	201.29	26.68	26.47	4.12	MWD
9391.00	59.60	271.10	9331.06	-86.18	-211.48	214.00	20.67	20.67	0.00	MWD
9408.00	63.20	271.30	9339.20	-85.86	-226.40	228.91	21.20	21.18	1.18	MWD
9423.00	66.80	270.90	9345.53	-85.60	-239.99	242.48	24.12	24.00	-2.67	MWD
9439.00	70.50	270.50	9351.36	-85.42	-254.89	257.37	23.24	23.12	-2.50	MWD
9454.00	74.30	269.80	9355.89	-85.39	-269.19	271.66	25.72	25.33	-4.67	MWD
9471.00	79.10	270.00	9359.80	-85.42	-285.73	288.19	28.26	28.24	1.18	MWD
9486.00	82.00	269.70	9362.27	-85.45	-300.52	302.98	19.43	19.33	-2.00	MWD
9503.00	85.00	268.60	9364.19	-85.71	-317.41	319.86	18.78	17.65	-6.47	MWD
9518.00	87.30	269.30	9365.20	-85.98	-332.37	334.83	16.02	15.33	4.67	MWD
9535.00	87.80	269.80	9365.92	-86.11	-349.35	351.81	4.16	2.94	2.94	MWD
9566.00	88.20	269.70	9367.01	-86.25	-380.34	382.78	1.33	1.29	-0.32	MWD
9581.00	88.10	269.70	9367.49	-86.33	-395.33	397.77	0.67	-0.67	0.00	MWD
9598.00	88.40	269.50	9368.01	-86.44	-412.32	414.75	2.12	1.76	-1.18	MWD
9629.00	88.70	269.50	9368.79	-86.72	-443.31	445.74	0.97	0.97	0.00	MWD
9654.00	87.30	269.80	9369.67	-86.87	-468.29	470.71	5.73	-5.60	1.20	MWD

Weatherford International, Inc.

Survey Report

Company: Cimarex
Field: Eddy Co., NM (NAD 83)
Site: Tank 29 Federal #2
Well: #2
Wellpath: 1

Date: 9/29/2008 **Time:** 09:02:30 **Page:** 2
Co-ordinate(NE) Reference: Well: #2, Grid North
Vertical (TVD) Reference: SITE 3458.0
Section (VS) Reference: Well (0.00N,0.00E,268.26Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
9661.00	87.10	270.00	9370.01	-86.88	-475.28	477.70	4.04	-2.86	2.86	MWD
9692.00	87.90	269.80	9371.36	-86.93	-506.25	508.66	2.66	2.58	-0.65	MWD
9724.00	90.90	269.70	9371.70	-87.07	-538.25	540.64	9.38	9.37	-0.31	MWD
9756.00	93.10	269.10	9370.58	-87.41	-570.22	572.62	7.13	6.87	-1.87	MWD
9787.00	93.30	268.60	9368.85	-88.03	-601.17	603.57	1.73	0.65	-1.61	MWD
9819.00	94.30	268.60	9366.73	-88.81	-633.09	635.49	3.12	3.12	0.00	MWD
9850.00	95.90	270.00	9363.97	-89.19	-663.96	666.36	6.85	5.16	4.52	MWD
9882.00	96.70	269.80	9360.46	-89.24	-695.77	698.16	2.58	2.50	-0.62	MWD
9913.00	94.30	270.90	9357.49	-89.05	-726.62	728.99	8.51	-7.74	3.55	MWD
9945.00	93.30	271.30	9355.37	-88.44	-758.55	760.88	3.36	-3.12	1.25	MWD
9977.00	94.10	271.30	9353.30	-87.72	-790.47	792.77	2.50	2.50	0.00	MWD
10008.00	94.40	271.30	9351.01	-87.02	-821.38	823.64	0.97	0.97	0.00	MWD
10039.00	92.20	271.10	9349.22	-86.37	-852.32	854.55	7.13	-7.10	-0.65	MWD
10071.00	90.50	271.80	9348.47	-85.56	-884.30	886.49	5.74	-5.31	2.19	MWD
10102.00	90.10	271.60	9348.31	-84.64	-915.28	917.43	1.44	-1.29	-0.65	MWD
10133.00	91.40	268.60	9347.90	-84.58	-946.28	948.41	10.55	4.19	-9.68	MWD
10165.00	91.70	267.00	9347.03	-85.81	-978.24	980.39	5.09	0.94	-5.00	MWD
10196.00	92.40	267.70	9345.92	-87.24	-1009.19	1011.37	3.19	2.26	2.26	MWD
10228.00	93.90	267.90	9344.17	-88.47	-1041.11	1043.32	4.73	4.69	0.62	MWD
10260.00	94.40	269.10	9341.85	-89.31	-1073.02	1075.23	4.05	1.56	3.75	MWD
10291.00	95.00	269.50	9339.31	-89.68	-1103.91	1106.13	2.32	1.94	1.29	MWD
10323.00	95.20	271.10	9336.47	-89.52	-1135.78	1137.98	5.02	0.62	5.00	MWD
10354.00	95.60	270.50	9333.55	-89.09	-1166.64	1168.81	2.32	1.29	-1.94	MWD
10386.00	96.10	270.50	9330.29	-88.81	-1198.47	1200.62	1.56	1.56	0.00	MWD
10418.00	97.20	270.40	9326.58	-88.56	-1230.26	1232.38	3.45	3.44	-0.31	MWD
10449.00	96.00	271.10	9323.02	-88.15	-1261.05	1263.14	4.47	-3.87	2.26	MWD
10481.00	94.90	271.40	9319.98	-87.46	-1292.90	1294.96	3.56	-3.44	0.94	MWD
10512.00	95.30	271.10	9317.22	-86.79	-1323.77	1325.79	1.61	1.29	-0.97	MWD
10544.00	96.10	271.10	9314.04	-86.18	-1355.60	1357.59	2.50	2.50	0.00	MWD
10576.00	96.90	271.10	9310.42	-85.56	-1387.39	1389.35	2.50	2.50	0.00	MWD
10608.00	95.20	270.90	9307.05	-85.01	-1419.21	1421.13	5.35	-5.31	-0.62	MWD
10640.00	95.00	270.20	9304.21	-84.70	-1451.08	1452.98	2.27	-0.62	-2.19	MWD
10671.00	95.80	270.40	9301.29	-84.54	-1481.94	1483.82	2.66	2.58	0.65	MWD
10703.00	96.60	270.50	9297.83	-84.29	-1513.75	1515.61	2.52	2.50	0.31	MWD
10734.00	95.20	271.40	9294.65	-83.78	-1544.58	1546.41	5.36	-4.52	2.90	MWD
10766.00	93.10	272.00	9292.33	-82.83	-1576.48	1578.27	6.82	-6.56	1.87	MWD
10797.00	93.70	272.10	9290.49	-81.73	-1607.41	1609.15	1.96	1.94	0.32	MWD
10829.00	94.10	271.80	9288.31	-80.64	-1639.31	1641.01	1.56	1.25	-0.94	MWD
10862.00	94.90	273.50	9285.73	-79.12	-1672.18	1673.81	5.68	2.42	5.15	MWD
10893.00	95.80	273.40	9282.83	-77.26	-1702.98	1704.54	2.92	2.90	-0.32	MWD
10925.00	96.00	272.60	9279.55	-75.60	-1734.77	1736.27	2.56	0.62	-2.50	MWD
10957.00	95.80	272.30	9276.26	-74.24	-1766.57	1768.01	1.12	-0.62	-0.94	MWD
10988.00	94.90	273.20	9273.37	-72.75	-1797.40	1798.78	4.10	-2.90	2.90	MWD
11020.00	94.30	272.00	9270.80	-71.31	-1829.26	1830.59	4.18	-1.87	-3.75	MWD
11052.00	94.10	271.60	9268.46	-70.31	-1861.16	1862.44	1.39	-0.62	-1.25	MWD
11083.00	94.70	271.80	9266.08	-69.39	-1892.06	1893.29	2.04	1.94	0.65	MWD
11115.00	95.10	272.00	9263.34	-68.33	-1923.92	1925.11	1.40	1.25	0.62	MWD
11146.00	95.90	271.80	9260.37	-67.31	-1954.76	1955.90	2.66	2.58	-0.65	MWD
11177.00	96.70	271.80	9256.97	-66.34	-1985.56	1986.66	2.58	2.58	0.00	MWD
11209.00	97.30	271.80	9253.07	-65.34	-2017.31	2018.36	1.87	1.87	0.00	MWD
11241.00	95.70	270.50	9249.45	-64.71	-2049.09	2050.11	6.43	-5.00	-4.06	MWD
11275.00	93.70	270.00	9246.66	-64.56	-2082.98	2083.97	6.06	-5.88	-1.47	LAST SVY @ 11275' MD
11320.00	93.70	270.00	9243.76	-64.56	-2127.88	2128.86	0.00	0.00	0.00	PROJ TO BIT

Weatherford International, Inc.

Survey Report

Company: Cimarex	Date: 9/29/2008	Time: 09:02:30	Page: 3
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: #2, Grid North		
Site: Tank 29 Federal #2	Vertical (TVD) Reference: SITE 3458.0		
Well: #2	Section (VS) Reference: Well (0.00N,0.00E,268.26Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Annotation

MD ft	TVD ft	
9033.63	9029.28	TIE ON
11275.00	9246.66	LAST SVY @ 11275' MD
11320.00	9243.76	PROJ TO BIT