

OPERATOR
WELL/LEASE
COUNTY

CIMAREX ENERGY COMPANY
TORREYS 7 FEE 1
LEA

075-0061

m - 7-15s-38e
430/5 & 430/10

STATE OF NEW MEXICO
DEVIATION REPORT

30-025-38586

293	0.50
650	0.50
1,012	1.00
1,466	0.50
2,004	1.75
2,591	1.75
3,077	2.00
3,522	0.50
4,032	0.75
4,602	0.75
4,939	1.00
5,416	1.00
6,012	0.75
6,425	1.50
6,668	1.50
6,999	1.50
7,446	1.50
8,015	1.00
8,519	1.75
9,000	1.75
9,384	0.75
9,762	1.50
9,825	1.50

STATE OF TEXAS

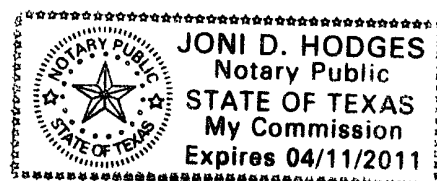
COUNTY OF MIDLAND

BY: Steve Moore

The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTI Drilling Company LLC.

February 8, 2008, by Steve

Joni D. Hodges
Notary Public for Midland County, Texas
My Commission Expires: 4/11/11



Results of Directional Survey

API number:	30-025-38586		
OGRID:		Operator:	CIMAREX ENERGY CO
		Property:	TORREYS 7 FEE # 1

surface	ULSTR:	M	07	T	15S	R	38E
			430	FSL		430	FWL

BH Loc	ULSTR:	L	07	T	15S	R	38E
			2289	FSL		424	FWL

	MD	N/S	E/W	VD
	9504	299.03	-25.91	9367.64
TOP PERFS/OH	9520	315.02	-25.49	9367.84
	9529	324.02	-25.25	9367.95
	10864	1658.33	-13.87	9342.96
BOT PERFS/OH	10875	1669.33	-13.57	9342.91
	10895	1689.32	-13.03	9342.82

NEXT TO LAST	11023	1817.20	-7.59	9314.96
LAST READING	11065	1859.15	-5.69	9341.96
TD	11065	1859.15	-5.69	9341.96

Surface Location	430	FS	430	FW
Projected BHL	2289	FS	424	FW
Location of				
Top Perfs/OH	745	FS	405	FW
Bottom Perfs/OH	2099	FS	416	FW

SUMMARY of Subsurface Locations

Surface Location	M-07-15S-38E	430	FS	430	FW	Vert. Depth
Top Perfs/OH	M-07-15S-38E	745	FS	405	FW	9367.84
Bottom Perfs/OH	L-07-15S-38E	2099	FS	416	FW	9342.91
Projected TD	L-07-15S-38E	2289	FS	424	FW	9341.96



Weatherford International, Inc.

Survey Report

**Weatherford**

Company: Cimarex Date: 3/24/2008 Time: 09:58:57 Page: 1
Field: Lea Co., NM (NAD 83) Co-ordinate(NE) Reference: Site: Torreys 7 Fee #1, True North
Site: Torreys 7 Fee #1 Vertical (TVD) Reference: SITE 3791.0
Well: #1 Section (VS) Reference: Well (0.00N,0.00E,359.99Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Field: Lea Co., NM (NAD 83)

Map System: US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Site Centre
Geomagnetic Model: bggm2007

Site: Torreys 7 Fee #1

430' FSL 430' FWL of SEC 7, T-15-S, R-38-E

Site Position: Northing: 738966.60 ft Latitude: 33 1 32.667 N
From: Map Easting: 905979.90 ft Longitude: 103 8 37.060 W
Position Uncertainty: 0.00 ft North Reference: True
Ground Level: 3775.00 ft Grid Convergence: 0.65 deg

Well: #1

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 738966.60 ft Latitude: 33 1 32.667 N
+E/-W 0.00 ft Easting: 905979.90 ft Longitude: 103 8 37.060 W
Position Uncertainty: 0.00 ft

Wellpath: 1

Current Datum: SITE Height 3791.00 ft
Magnetic Data: 2/13/2008
Field Strength: 49544 nT
Vertical Section: Depth From (TVD) +N/-S
ft ft
0.00 0.00 0.00 359.99

Drilled From: GYRO
Tie-on Depth: 10136.00 ft
Above System Datum: Mean Sea Level
Declination: 7.88 deg
Mag Dip Angle: 61.11 deg
+E/-W Direction
ft deg

Survey: WFT SVY

Start Date: 3/16/2008

Company: Weatherford International, Inc
Tool: MWD;MWD - Standard

Engineer: Lindsey Maddux
Tied-to: From: Definitive Path

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
9120.00	2.17	37.33	9117.93	78.36	-34.71	78.37	0.00	0.00	0.00	HOLD
9169.23	2.17	37.33	9167.12	79.84	-33.58	79.85	0.00	0.00	0.00	TIE ON TOP WHIP
9206.00	9.10	8.80	9203.70	83.27	-32.71	83.28	19.76	18.85	-77.59	MWD
9220.00	12.80	5.90	9217.44	85.91	-32.38	85.92	26.71	26.43	-20.71	MWD
9252.00	21.80	1.20	9247.96	95.40	-31.89	95.40	28.44	28.12	-14.69	MWD
9284.00	31.50	0.20	9276.53	109.73	-31.74	109.74	30.34	30.31	-3.12	MWD
9315.00	42.30	1.50	9301.28	128.32	-31.43	128.32	34.93	34.84	4.19	MWD
9347.00	52.10	3.00	9323.00	151.75	-30.49	151.75	30.82	30.62	4.69	MWD
9379.00	61.20	1.40	9340.57	178.43	-29.48	178.43	28.74	28.44	-5.00	MWD
9410.00	69.80	1.00	9353.41	206.60	-28.90	206.61	27.77	27.74	-1.29	MWD
9425.00	74.60	1.00	9358.00	220.88	-28.65	220.88	32.00	32.00	0.00	MWD
9441.00	78.40	1.40	9361.73	236.43	-28.32	236.44	23.87	23.75	2.50	MWD
9459.00	83.40	2.40	9364.58	254.19	-27.73	254.19	28.31	27.78	5.56	MWD
9472.00	85.10	2.60	9365.88	267.11	-27.17	267.12	13.17	13.08	1.54	MWD
9504.00	88.60	1.90	9367.64	299.03	-25.91	299.04	11.15	10.94	-2.19	MWD
9529.00	90.00	1.12	9367.95	324.02	-25.25	324.03	6.41	5.60	-3.12	MWD
9536.00	90.40	0.90	9367.92	331.02	-25.13	331.02	6.52	5.71	-3.14	MWD
9567.00	90.90	0.30	9367.57	362.02	-24.81	362.02	2.52	1.61	-1.94	MWD
9599.00	91.70	0.00	9366.84	394.01	-24.72	394.01	2.67	2.50	-0.94	MWD
9631.00	93.40	359.40	9365.42	425.97	-24.89	425.98	5.63	5.31	-1.88	MWD
9662.00	91.60	0.50	9364.07	456.94	-24.92	456.95	6.80	-5.81	3.55	MWD
9694.00	89.50	0.70	9363.76	488.94	-24.58	488.94	6.59	-6.56	0.62	MWD
9725.00	90.10	0.50	9363.87	519.94	-24.26	519.94	2.04	1.94	-0.65	MWD
9755.00	90.80	359.80	9363.63	549.93	-24.18	549.94	3.30	2.33	-2.33	MWD

SUR: M-7-15s-38e, 430/S & 430/W
BHL: L-7-15s-38e, 2289/S & 424/W
API # 30-025-38586



Weatherford International, Inc.

Survey Report



Weatherford

Company: Cimarex
Field: Lea Co , NM (NAD 83)
Site: Torreys 7 Fee #1
Well: #1
Wellpath: 1

Date: 3/24/2008
Co-ordinate(NE) Reference: Site: Torreys 7 Fee #1, True North
Vertical (TVD) Reference: SITE 3791.0
Section (VS) Reference: Well (0.00N,0.00E,359.99Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Page: 2

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
9786.00	91.40	359.80	9363.04	580.93	-24.29	580.93	1.94	1.94	0.00	MWD
9818.00	92.20	0.30	9362.03	612.91	-24.26	612.92	2.95	2.50	1.56	MWD
9850.00	93.00	0.90	9360.58	644.88	-23.92	644.88	3.12	2.50	1.87	MWD
9882.00	91.90	1.40	9359.21	676.84	-23.28	676.85	3.78	-3.44	1.56	MWD
9913.00	92.00	1.00	9358.16	707.82	-22.63	707.82	1.33	0.32	-1.29	MWD
9945.00	92.90	1.40	9356.79	739.78	-21.96	739.78	3.08	2.81	1.25	MWD
9977.00	93.40	1.70	9355.03	771.72	-21.10	771.72	1.82	1.56	0.94	MWD
10009.00	91.50	1.50	9353.66	803.68	-20.21	803.68	5.97	-5.94	-0.62	MWD
10040.00	91.80	1.20	9352.77	834.66	-19.48	834.66	1.37	0.97	-0.97	MWD
10072.00	92.00	1.00	9351.71	866.63	-18.86	866.63	0.88	0.62	-0.62	MWD
10104.00	92.20	0.90	9350.54	898.61	-18.33	898.61	0.70	0.62	-0.31	MWD
10136.00	92.30	0.30	9349.28	930.58	-18.00	930.58	1.90	0.31	-1.87	MWD
10167.00	92.50	0.20	9347.98	961.55	-17.86	961.55	0.72	0.65	-0.32	MWD
10199.00	92.70	359.80	9346.53	993.52	-17.86	993.52	1.40	0.62	-1.25	MWD
10230.00	93.30	359.60	9344.91	1024.48	-18.03	1024.48	2.04	1.94	-0.65	MWD
10262.00	91.90	0.00	9343.46	1056.44	-18.14	1056.44	4.55	-4.37	1.25	MWD
10294.00	92.20	359.80	9342.31	1088.42	-18.19	1088.42	1.13	0.94	-0.63	MWD
10326.00	90.80	0.00	9341.48	1120.41	-18.25	1120.41	4.42	-4.37	0.63	MWD
10358.00	90.00	0.00	9341.25	1152.41	-18.25	1152.41	2.50	-2.50	0.00	MWD
10389.00	89.80	0.30	9341.31	1183.41	-18.17	1183.41	1.16	-0.65	0.97	MWD
10421.00	89.90	0.00	9341.39	1215.41	-18.08	1215.41	0.99	0.31	-0.94	MWD
10453.00	90.00	0.20	9341.42	1247.41	-18.03	1247.41	0.70	0.31	0.62	MWD
10484.00	90.70	359.60	9341.23	1278.41	-18.08	1278.41	2.97	2.26	-1.94	MWD
10516.00	89.50	0.00	9341.17	1310.41	-18.19	1310.41	3.95	-3.75	1.25	MWD
10548.00	90.20	359.80	9341.26	1342.41	-18.25	1342.41	2.28	2.19	-0.63	MWD
10579.00	90.50	359.40	9341.07	1373.40	-18.47	1373.41	1.61	0.97	-1.29	MWD
10611.00	89.50	0.00	9341.07	1405.40	-18.63	1405.41	3.64	-3.12	1.88	MWD
10642.00	89.60	0.00	9341.31	1436.40	-18.63	1436.40	0.32	0.32	0.00	MWD
10673.00	89.10	1.20	9341.66	1467.40	-18.31	1467.40	4.19	-1.61	3.87	MWD
10705.00	90.10	1.00	9341.89	1499.39	-17.69	1499.39	3.19	3.12	-0.62	MWD
10737.00	90.00	1.00	9341.86	1531.39	-17.14	1531.39	0.31	-0.31	0.00	MWD
10769.00	88.70	1.90	9342.22	1563.37	-16.33	1563.37	4.94	-4.06	2.81	MWD
10800.00	89.30	1.70	9342.76	1594.35	-15.35	1594.35	2.04	1.94	-0.65	MWD
10832.00	90.00	1.20	9342.96	1626.34	-14.54	1626.34	2.69	2.19	-1.56	MWD
10864.00	90.00	1.20	9342.96	1658.33	-13.87	1658.34	0.00	0.00	0.00	MWD
10895.00	90.50	1.90	9342.82	1689.32	-13.03	1689.32	2.77	1.61	2.26	MWD
10927.00	91.20	2.10	9342.35	1721.30	-11.92	1721.30	2.28	2.19	0.62	MWD
10959.00	90.60	2.80	9341.84	1753.27	-10.55	1753.27	2.88	-1.87	2.19	MWD
10991.00	89.50	2.60	9341.82	1785.23	-9.04	1785.23	3.49	-3.44	-0.62	MWD
11023.00	90.00	2.60	9341.96	1817.20	-7.59	1817.20	1.56	1.56	0.00	LAST SVY @ 11023' MD
11065.00	90.00	2.60	9341.96	1859.15	-5.69	1859.15	0.00	0.00	0.00	PROJ TO BIT

Annotation

MD ft	TVD ft	
9120.00	9117.93	HOLD
9169.23	9167.12	TIE ON TOP WHIP
11023.00	9341.96	LAST SVY @ 11023' MD
11065.00	9341.96	PROJ TO BIT



TORREYS 7 FEE #1 LEA COUNTY, NEW MEXICO



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	9120 00	2 17	37 33	9117 93	78 36	-34 71	0 00	0 00	78 37	
2	9169 23	2 17	37 33	9167 12	79 84	-33 58	0 00	0 00	79 85	
3	9176 73	3 28	1 06	9174 61	80 17	-33 49	26 67	-76 17	80 18	
4	9182 00	3 28	1 06	9179 87	80 47	-33 48	0 00	0 00	80 48	
5	9471 18	90 00	1 06	9360 00	271 20	-29 96	29 99	0 00	271 20	
6	10500 16	90 00	1 06	9360 00	1300 00	-10 99	0 00	0 00	1300 00	
7	10570 20	87 90	1 06	9361 29	1370 01	-9 70	3 00	-179 98	1370 01	
8	11080 62	87 90	1 06	9380 00	1880 00	-0 30	0 00	0 00	1880 00	Target 3

WELL DETAILS

Name+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#1 0 00	0 00	738966 60	905979 90	33°01'32 667N	103°08'37 060W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Target 3	9380 00	1880 00	-0 30	740846 48	905958 32	Point

FIELD DETAILS

Lea 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 True North

SITE DETAILS

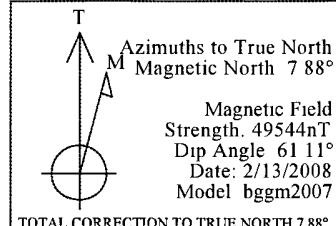
Torreys 7 Fee #1
430' FSL 430' FWL of SEC 7, T-15-S, R-38-E

Site Centre Northing 738966 60
Easting 905979 90

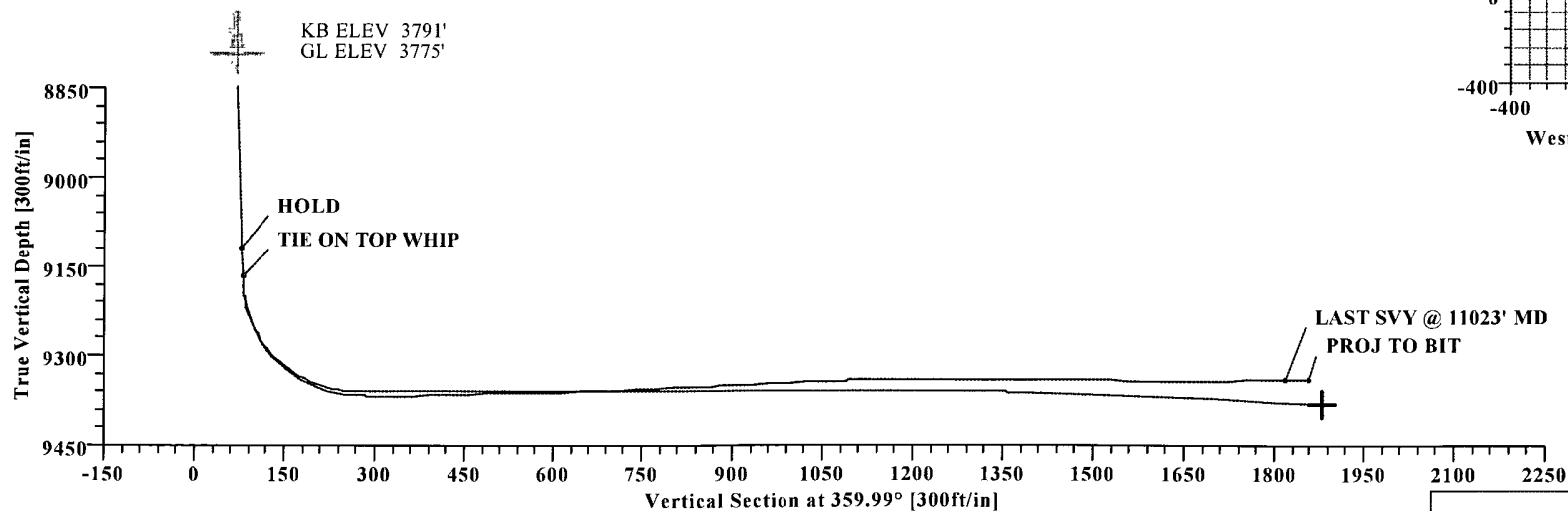
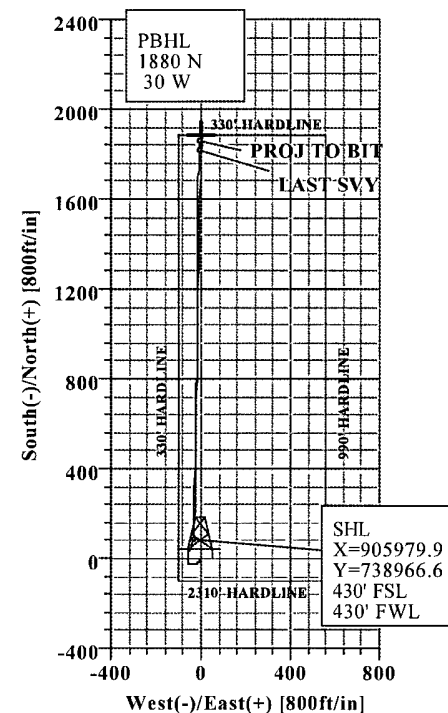
Ground Level 3775 00
Positional Uncertainty 0 00
Convergence 0 65

LEGEND

#1, Plan #4
WFT SVY



VERTICAL SECTION AZIMUTH 359.99°



Survey WFT SVY (#1/1)

Created By Lindsey Maddux

Date 3/24/2008



WINDOW @ 9168 FT

4 5/8" x 2 7/8" ISO Pak: 9520'

2.00" ID Strata Port: 9750'

4 5/8" x 2 7/8" ISO Pak: 10100'

1 3/4" ID Strata Port: 10400'

4 5/8" x 2 7/8" ISO Pak: 10600'

4 5/8" x 2 7/8" Anchor: 10803'

Pump Out Plug 10875"

TOTAL MEASURED DEPTH
@ 11,065 FT

Arrow Set Packer & On/Off Tool		Top @ 9067'									
DOWN HOLE WELL PROFILE											
WELL NAME		Torreys 7 Fee #1		DATE		3/24/08					
SUPERVISOR		Guy Embry		TOOL HAND		Rodney Blanton					
PHONE #		303-285-5928 (Rig)		PHONE #		432-425-9679					
RIG #		Key		FIELD TICKET #		9435					
ELEVATIONS											
KB ELEV		GL ELEV		KB TO THF		KB TO SCF		RIG KBD		TD	
8										11065.00	
CASING / OPEN HOLE LAYOUT				OD (IN)		LANDED DEPTH		WEIGHT (LB/FT)		TOP OF (FTKB)	
CASING DESCRIPTION				5.5		9168 (Window)		17			
WINDOW DESCRIPTION											
OPEN HOLE DESCRIPTION				4.625				JUNCTION @		9168.00	
DESCRIPTION											
STEERING DIRECTIONS											
DOWNHOLE DESCRIPTION FROM BOTTOM UP (Tubing String)											
BOTTOM @		DESCRIPTION				LENGTH		ID		OD	
10875.00		End Of String				0.00					
10875.00		2 7/8" Pump Out Plug				0.80		1.13		3.63	
10874.20		2 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Tubing (1-2)				65.45		2.44		4.50	
10808.75		3 1/2" Ult-Fx Box x 2 7/8" 8rd Pin Crossover				0.90		2.44		3.50	
10807.85		4 5/8" x 2 7/8" Hydro Set Anchor				4.42		2.44		4.50	
10803.43		6 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Tubing (3-8)				196.15		2.44		2.88	
10607.28		2' x 2 7/8" Pup Joint				2.18		2.44		2.88	
10605.10		4 5/8" X 2 7/8" 8rd ISO Pak Pkr				4.97		2.44		4.50	
10600.13		6 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Tubing (9-14)				196.22		2.44		2.88	
10403.91		2' x 2 7/8" Pup Joint				2.09		2.44		4.50	
10401.82		2 7/8" 8rd Strata Port 1 3/4" ID				2.16		1.81		4.00	
10399.66		9 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Tubing (15-23)				294.03		2.44		2.88	
10105.63		3 1/2" Ult-Fx Box x 2 7/8" 8rd Pin Crossover				0.90		2.44		3.50	
10104.73		4 5/8" X 2 7/8" 8rd ISO Pak Pkr				4.97		2.44		4.50	
10099.76		10 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Tubing (24-33)				326.81		2.44		2.88	
9772.95		10' x 2 7/8" Pup Joint				10.20		2.44		4.50	
9762.75		10' x 2 7/8" Pup Joint				10.27		2.44		2.88	
9752.48		2 7/8" 8rd Strata Port 2.00" ID				2.16		2.06		4.00	
9750.32		6 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Tubing (34-39)				196.04		2.44		4.50	
9554.28		12' x 2 7/8" Pup Joint				12.20		2.44		2.88	
9542.08		10' x 2 7/8" Pup Joint				10.27		2.44		2.88	
9531.81		6' x 2 7/8" Pup Joint				6.10		2.44		2.88	
9525.71		3 1/2" Ult-Fx Box x 2 7/8" 8rd Pin Crossover				0.90		2.44		4.50	
9524.81		4 5/8" X 2 7/8" 8rd ISO Pak Pkr				4.97		2.44		4.50	
9519.84		2 7/8" 8rd Pin x 2 7/8" UF Box Crossover				0.92		2.44		3.50	
9518.92		14 Jts 2 7/8" 6.5# Ultra FX L-80 Tbg				438.58		2.44		2.88	
9080.34		2 7/8" UF Pin x 2 7/8" 8rd Pin Crossover				1.10		2.44		3.50	
9079.24		Swivel				1.08		2.50		4.38	
9078.16		5 1/2" x 2 7/8" 10K Arrowset Packer				7.38		2.50		4.63	
9070.78		2 7/8" Pin x 2 7/8" Pin Crossover				0.65		2.50		3.13	
9070.13		5 1/2" X 2 7/8" Inverted On/Off Tool				3.12		2.50		4.50	
9067.01		2 7/8" AOH Box x 2 7/8" 8rd Pin Crossover				1.32		2.25		3.88	
9065.69		287 Jts 2 7/8" AOH Drill Pipe				9066.11		2.15		2.88	
-0.42		Correction				8.00		0.00		0.00	
-8.42		Stick Up				-8.42					
WEIGHT OF STRING		100K		TOTAL STRING LENGTH		10875.42					
PUSH / PULL TEST		20K		STICK-UP OFF Bttm		190.00					
LINER STRING WEIGHT		5K		TUBING BOTTOM		10875.00					

*** CONFIDENTIAL ***
NOT TO BE DISCLOSED OUTSIDE
** Cimarex Energy **