

Results of Directional Survey

API number:	30-025-40578		
OGRID:		Operator:	CIMAREX ENERGY CO.
		Property:	TRISTE DRAW 36 STATE # 6H

surface	ULSTR:	D	36	T	23S	R	32E
				695	FNL	375	FWL

BH Loc	ULSTR:	M	36	T	23S	R	32E
15038	MD	11011.7	TVD	342	FSL	690	FWL
				4938	FNL	690	FWL

Top Perf/OH	ULSTR:	D	36	T	23S	R	32E
11000	MD	10895.6	TVD	927	FNL	688	FWL

Bot Perf/OH	ULSTR:	M	36	T	23S	R	32E
14952	MD	11010.2	TVD	428	FSL	692	FWL
				4852	FNL		

	MD	N/S	E/W	VD
	10986	-220.37	313.23	10887.39
TOP PERFS/OH	11000	-231.69	312.68	10895.60
	11018	-246.25	311.98	10906.16
	14863	-4068.40	318.91	11008.06
BOT PERFS/OH	14952	-4157.35	317.04	11010.16
	14959	-4164.35	316.89	11010.33

NEXT TO LAST	14984	-4189.34	316.30	11010.79
LAST READING	15038	-4243.32	315.09	11011.70
TD	15038	-4243.32	315.09	11011.70

Surface Location	695	FN	375	FW
Projected BHL	4938	FN	690	FW
Location of				
Top Perfs/OH	927	FN	688	FW
Bottom Perfs/OH	4852	FN	692	FW

SUMMARY of Subsurface Locations

Surface Location	D-36-23S-32E	695	FN	375	FW	Vert. Depth
Top Perfs/OH	D-36-23S-32E	927	FN	688	FW	10895.60
Bottom Perfs/OH	M-36-23S-32E	4852	FN	692	FW	11010.16
Projected TD	M-36-23S-32E	4938	FN	690	FW	11011.70

MAR 07 2013

HOBBS OCD

FEB 04 2013

RECEIVED

CIMAREX ENERGY

Triste Draw
Lea County, NM
Triste Draw 36 State #6
VH - Job #32K0712824

HOBBS OCD

FEB 04 2013

RECEIVED

SUR: D-36-23s-32e, 695/N & 375/W
BHL: M-36-23s-32e, 4938/N & 690/W
API # 30-025-40578

Survey: Gyro

SDI Standard Survey Report

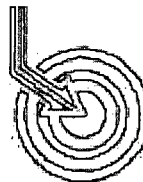
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notarized this date 3rd of August, 2012.

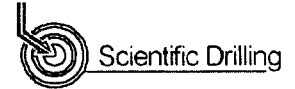
Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	CIMAREX ENERGY	Local Co-ordinate Reference:	Well Triste Draw 36 State #6
Project:	Triste Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Triste Draw 36 State #6	North Reference:	Grid
Wellbore:	VH - Job #32K0712824	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0712824	Database:	EDM-Regulatory

Project	Triste Draw		
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	Lea County, NM		
Site Position:		Northing:	461,190.86 usft
From:	Lat/Long	Easting:	715,854.66 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 15' 57.600 N
		Longitude:	103° 38' 6.000 W
		Grid Convergence:	0.37 °

Well	Triste Draw 36 State #6, Directional (Schlumberger)		
Well Position	+N/-S	0.00 usft	Northing: 461,190.86 usft
	+E/-W	0.00 usft	Easting: 715,854.66 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 15' 57.600 N
		Longitude:	103° 38' 6.000 W
		Ground Level:	0.00 usft

Wellbore	VH - Job #32K0712824				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/04/12	7.49	60.19	48,555

Design	VH - Job #32K0712824			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	3.26

Survey Program	Date	08/13/12		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	4,828.00	Gyro (VH - Job #32K0712824)	Keeper	Keeper Gyro

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.40	89.83	100.00	0.00	0.35	89.83	0.35	
200.00	0.41	73.59	200.00	0.10	1.04	84.34	1.05	
300.00	0.40	8.09	299.99	0.55	1.43	69.02	1.54	
400.00	0.19	355.24	399.99	1.06	1.47	54.17	1.81	
572.22	0.32	332.72	572.21	1.77	1.22	34.64	2.15	
667.94	0.38	318.49	667.93	2.25	0.89	21.64	2.42	
763.66	0.46	321.82	763.65	2.79	0.44	9.05	2.82	
859.38	0.40	322.01	859.36	3.35	0.00	0.02	3.35	
955.10	0.38	320.58	955.08	3.86	-0.41	353.99	3.88	
1,050.82	0.41	303.44	1,050.80	4.30	-0.89	348.25	4.39	
1,146.54	0.32	306.38	1,146.52	4.64	-1.39	343.28	4.85	

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	CIMAREX ENERGY	Local Co-ordinate Reference:	Well Triste Draw 36 State #6
Project:	Triste Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Triste Draw 36 State #6	North Reference:	Grid
Wellbore:	VH - Job #32K0712824	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0712824	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,242.26	0.39	329.75	1,242.24	5.08	-1.77	340.76	5.38
1,337.98	0.33	334.59	1,337.95	5.61	-2.06	339.88	5.98
1,433.70	0.61	349.98	1,433.67	6.36	-2.26	340.42	6.75
1,529.42	0.52	332.32	1,529.39	7.25	-2.55	340.60	7.69
1,625.14	0.53	331.54	1,625.10	8.02	-2.97	339.71	8.55
1,720.86	0.51	326.48	1,720.82	8.77	-3.41	338.73	9.41
1,816.58	0.58	301.78	1,816.53	9.38	-4.06	336.59	10.22
1,912.30	0.60	276.95	1,912.25	9.69	-4.97	332.86	10.89
2,008.02	0.50	258.93	2,007.97	9.68	-5.88	328.73	11.32
2,103.74	0.45	250.92	2,103.68	9.47	-6.64	324.96	11.57
2,199.46	0.34	245.57	2,199.40	9.23	-7.26	321.84	11.74
2,295.18	0.25	244.04	2,295.12	9.02	-7.70	319.52	11.86
2,390.90	0.18	272.26	2,390.84	8.94	-8.04	318.03	12.02
2,486.62	0.16	301.18	2,486.56	9.01	-8.30	317.34	12.25
2,582.34	0.18	290.76	2,582.28	9.13	-8.56	316.86	12.52
2,678.06	0.08	297.55	2,678.00	9.22	-8.76	316.47	12.72
2,773.78	0.23	23.20	2,773.72	9.43	-8.74	317.16	12.86
2,869.50	0.48	24.85	2,869.43	9.97	-8.50	319.55	13.10
2,965.22	0.69	3.41	2,965.15	10.91	-8.30	322.74	13.70
3,060.94	0.78	0.32	3,060.86	12.13	-8.26	325.76	14.68
3,156.66	0.82	349.67	3,156.57	13.46	-8.38	328.10	15.85
3,252.38	0.78	343.98	3,252.28	14.76	-8.68	329.54	17.12
3,348.10	0.68	339.75	3,348.00	15.92	-9.06	330.36	18.31
3,443.82	0.46	316.34	3,443.71	16.73	-9.52	330.36	19.25
3,539.54	0.16	292.43	3,539.43	17.06	-9.91	329.85	19.73
3,635.26	0.38	210.86	3,635.15	16.84	-10.19	328.81	19.68
3,730.98	0.05	31.87	3,730.87	16.60	-10.33	328.10	19.55
3,826.70	0.28	41.68	3,826.59	16.81	-10.16	328.86	19.64
3,922.16	0.42	4.63	3,922.05	17.33	-9.97	330.08	20.00
4,017.28	0.48	321.79	4,017.16	17.99	-10.19	330.47	20.68
4,113.26	0.28	281.14	4,113.14	18.35	-10.67	329.83	21.23
4,209.24	0.10	292.41	4,209.12	18.43	-10.98	329.22	21.45
4,305.22	0.69	110.90	4,305.10	18.26	-10.51	330.06	21.07
4,400.10	1.57	93.79	4,399.96	17.97	-8.68	334.20	19.96
4,495.77	1.70	66.74	4,495.59	18.44	-6.07	341.77	19.42
4,591.62	1.69	59.74	4,591.40	19.71	-3.55	349.80	20.03
4,687.39	1.66	52.12	4,687.13	21.28	-1.23	356.69	21.31
4,783.16	1.56	41.60	4,782.86	23.10	0.73	1.81	23.12
4,828.00	1.52	23.45	4,827.69	24.11	1.37	3.26	24.15

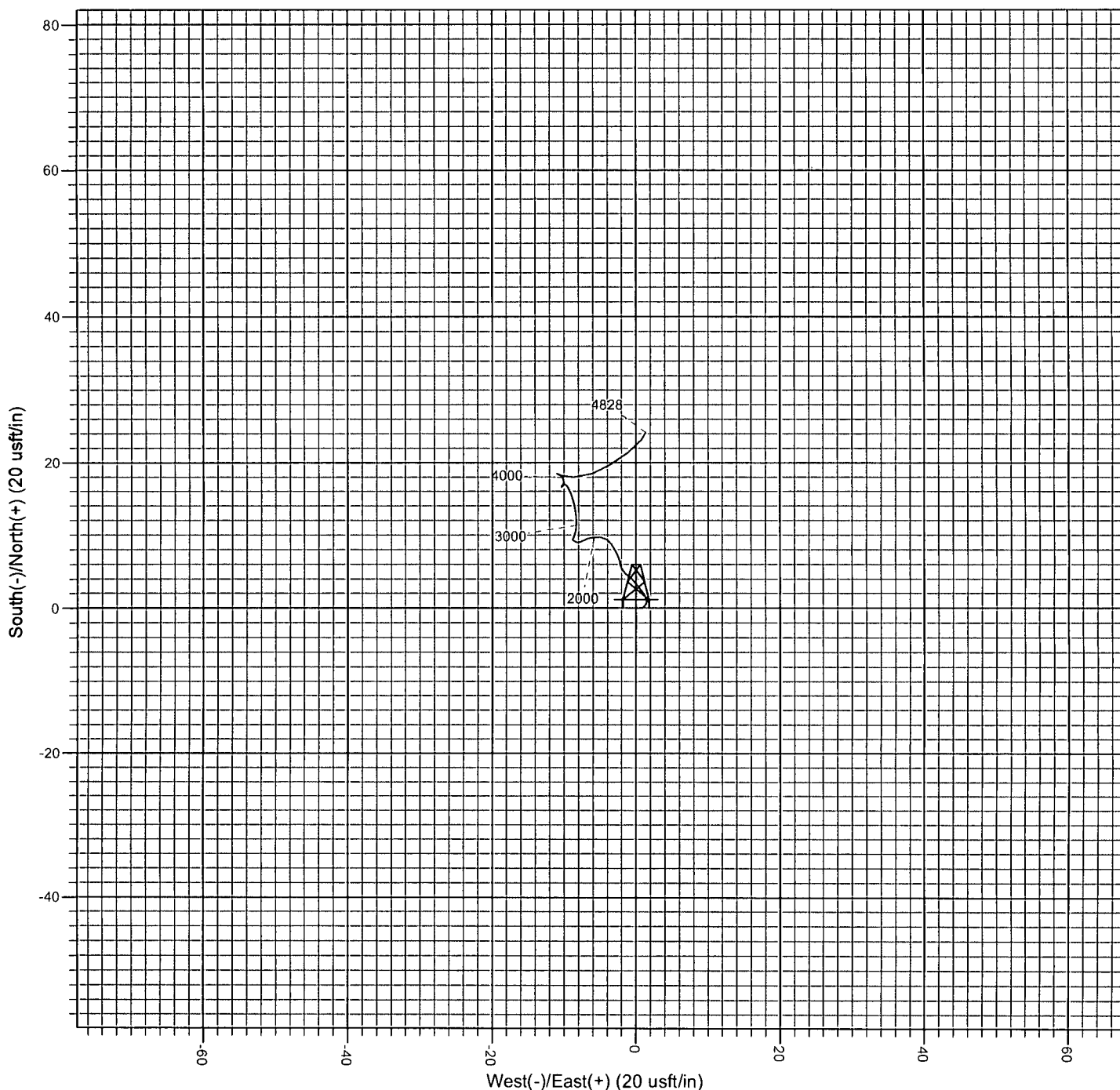


Scientific Drilling

Project: Triste Draw
Lea County, NM
Well: Triste Draw 36 State #6
Wellbore: VH - Job #32K0712824
Design: VH - Job #32K0712824

WELL DETAILS: Triste Draw 36 State #6
WELL @ 0.00usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	461190.86	715854.66	32° 15' 57.600 N	103° 38' 6.000 W	



PROJECT DETAILS: Triste Draw	SITE DETAILS: Lea County, NM
Geodetic System: US State Plane 1927 (Exact solution)	Site Centre Latitude: 32° 15' 57.600 N
Datum: NAD 1927 (NADCON CONUS)	Longitude: 103° 38' 6.000 W
Ellipsoid: Clarke 1866	Positional Uncertainty: 0.00
Zone: New Mexico East 3001	Convergence: 0.37
System Datum: Mean Sea Level	Local North: Grid

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

SUR: D-36-23s-32e, 695/N & 375/W
BHL: M-36-23s-32e, 4938/N & 690/W
API # 30-025-40578

September 27, 2012

Cimarex

600 N MARIENFELD STREET SUITE 600

MIDLAND, TX 79701

HOBBS OCD

FEB 04 2013

RECEIVED

Re:

D-36-23S-32E 695 FNL 375 FWL
N 32.266559 W 103.63562

CLIENT: Cimarex Energy Co.
WELL: Triste Draw 36 State #006
FIELD: Triste Draw
RIG: Cactus 104
COUNTY: Lea New Mexico
API NO: 30-025-40578
JOB NO: 12MLD0360

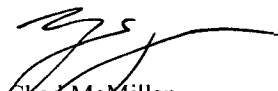
Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation.

Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Connor Ferguson MWD	Triste Draw 36 State #006 Original Hole	5000.00 Ft to 11318.00 Ft	July 7, 2012 to July 15, 2012	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.

Sincerely,


Chad McMillan
Field Service Manager

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

Well Reference:

Sec 8 T17S R31E NWNW Lot D 905FNL 900FWL

N 32.266559 W 103.63562

I, Connor Ferguson certify that; I am employed by Drilling & Measurements (formerly Anadrill), a division of Schlumberger Technology Corporation; that I did on the day(s) of July 07, 2012 through July 15, 2012, conduct or supervise the taking of the SlimPulse surveys from a depth of 5000.00 feet to a depth of 11318.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Cimarex Energy Co. for the Triste Draw 36 State #006 Well (Original Hole) API No. 30-025-40578 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By

Connor Ferguson(signature)

MWD



Subscribed and Sworn to before me this _____ day of _____ (month) _____ (yr)

My Commission expires:

Notary Public

(signature)

(County State)

30-025-40578 TRISTE DRAW 36 STATE #006 [38694]**General Well Information****Status:** New (Not Drilled or Completed)

Well Type: Oil
Work Type: New
Surface Location: D-36-23S-32E 695 FNL 375 FWL
Lat/Long: 32.2665587756432 -103.635623402041
GL Elevation: 3692

Direction:
Lease Type: State

Sing/Mult Compl:
Potash Waiver:

Proposed Formation and/or Notes

2nd Bone Spring Sand

Depths

Proposed: 15242

Measured: 0
Plugback Measured:

Formation Tops

Formation	Top	Method Obtained
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Event Dates

Initial APD Approval: 5/18/2012
Most Recent APD Approval: 5/18/2012
APD Cancellation:
APD Extension Approval:
Spud: 12/31/9999
Approved Temporary Abandonment:
Shut In Waiting For Pipeline:
Plug and Abandoned Intent Received:
Well Plugged:
Site Release:
Last Inspection: 7/5/2012

Current APD Expiration: 5/18/2014

Expiration:

Plugged, Not Released
Expiration:
Intention To Plug:
Last MIT:

History

Effective Date	Property	Operator	C-101 Work Type	Well Type
5/18/2012	[38694] TRISTE DRAW 36 STATE	[215099] CIMAREX ENERGY CO.	N	Oil

Comments

Date/Time	User Id	Comment
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Operator

Company: [215099] CIMAREX ENERGY CO.
Address: 600 N MARIENFELD STREET SUITE 600
MIDLAND ,TX-79701
Country:
Main Phone:

Central Contact Person

No district contact found.

Pits**Casing****Well Completions**

[96603] TRISTE DRAW;BONE SPRING**Status: New, Not Drilled****Last Produced:****Financial Assurance****Compliance**

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Rep](#))

Also note that some compliance issues are addressed at the operator level so not listed under each well.

Complaints, Incidents and Spills

No Incidents Found

Please note that incidents that impact ground water are recorded along with "facilities" which may not be wells, so although the initial report may be related to the abatement plans, remediation plans and ground water impact information are not yet part of this application.

Orders

No Orders Found

Production / Injection[Show All](#)

Earliest Production in OCD Records:				Last					
	Production				Injection				
Time Frame	Oil(BBLS)	Gas (MCF)	Water (BBLS)	Days P/I	Water (BBLS)	Co2 (MCF)	Gas (MCF)	Other	Pressure
Grand Total:	0	0	0	0	0	0	0	0	0

Transporters

Transporter	Product	
[21778] SUNOCO INC (R&M)	Oil	
[36785] DCP MIDSTREAM, LP	Gas	

Client: Climarex Energy Co.
Field: Triste Draw
Well: Triste Draw 36 State #006
API number: 30-025-40578
Engineer: Connor Ferguson
County: Lea
State: New Mexico
Rig: Cactus 104
Latitude: 32° 15' 59.59" N
Longitude: 103° 38' 8.298" W

Survey calculation methods
Method for positions: Minimum curvature
Method for DLS: Lubinski
Depth reference
Permanent datum: MSL
Driller's Depth
GL above permanent: 3692.00
KB above permanent: 3713.00
DF above permanent: 3713.00

Vertical section origin
Latitude (+N/-): 0.00 ft
Departure (+E/-): 0.00 ft

Grid Coordinates
NAD83 New Mexico State Plane, Eastern Zone, US Feet
X: 461406.90 ft
Y: 756988.90 ft

Azimuth from Vsect Origin to target: 83.85 degrees

-----MWD Survey Reference Criteria-----

-----Run1-----
Calculation Date: 6-Jul-2012
Location G...: 998.94325 mgn
Location B...: 48525.37 nT
Magnetic Dip: 60.1462 degrees
Tolerance G...: 2.50 mgn
Tolerance B...: 300.00 nT
Tolerance Dip: 0.45 degrees

-----Run2-----
Calculation Date: 10-Jul-2012
Location G...: 998.94325 mgn
Location B...: 48524.01 nT
Magnetic Dip: 60.1457 degrees
Tolerance G...: 2.50 mgn
Tolerance B...: 300.00 nT
Tolerance Dip: 0.45 degrees

-----Run3-----
Calculation Date: 10-Jul-2012
Location G...: 998.94325 mgn
Location B...: 48524.01 nT
Magnetic Dip: 60.1457 degrees
Tolerance G...: 2.50 mgn
Tolerance B...: 300.00 nT
Tolerance Dip: 0.45 degrees

-----Run4-----
Calculation Date: 14-Jul-2012
Location G...: 998.94325 mgn
Location B...: 48522.65 nT
Magnetic Dip: 60.1451 degrees
Tolerance G...: 2.50 mgn
Tolerance B...: 300.00 nT
Tolerance Dip: 0.45 degrees

BGGM Model: 2011

-----Run1-----
Magnetic dec (+E/-): 7.5714 degrees
Grid Conv (+E/-): 0.3714 degrees
Total Azim Corr (+E/-): 7.2 degrees

-----Run2-----
Magnetic dec (+E/-): 7.5702 degrees
Grid Conv (+E/-): 0.3702 degrees
Total Azim Corr (+E/-): 7.2 degrees

-----Run3-----
Magnetic dec (+E/-): 7.5702 degrees
Grid Conv (+E/-): 0.3702 degrees
Total Azim Corr (+E/-): 7.2 degrees

-----Round-----														
Magnetic dec (+E/W-), 7.569 degrees														
Grid Conv (+E/W-), 0.369 degrees														
Total Azim Corr (+E/W-),... 7.2 degrees														
-----Survey Correction Index Description-----														
0 = Uncorrected 1 = Sag Corrected														
2 = DMAG Corrected 3 = Sag + DMAG Corrected														
===== Survey List =====														
Seq	MD	Incl	Azim	Course	TVD	V Sec	N-/S	E-/W	Closure	at Azi	DLS	Tool	Correction	
1	0.00	0.00	-999.25	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	TIP	0	
2	100.00	0.40	89.83	100.00	100.00	0.35	0.00	0.00	0.35	89.83	0.40	GyroTool	0	
3	200.00	0.41	73.59	100.00	200.00	1.05	0.10	1.04	0.35	84.34	0.11	GyroTool	0	
4	400.00	0.40	8.09	100.00	299.99	1.48	0.55	1.43	0.35	69.02	0.44	GyroTool	0	
5	300.00	0.19	355.24	100.00	399.99	1.57	1.06	1.47	1.81	54.17	0.22	GyroTool	0	
6	572.22	0.32	332.72	172.22	572.21	1.41	1.77	1.22	2.15	34.64	0.09	GyroTool	0	
7	667.94	0.38	318.49	95.72	667.93	1.13	2.25	0.89	2.42	21.64	0.11	GyroTool	0	
8	763.66	0.46	321.82	95.72	763.65	0.74	2.79	0.44	2.82	9.05	0.09	GyroTool	0	
9	859.38	0.40	322.01	95.72	859.36	0.36	3.35	0.00	3.35	0.02	0.06	GyroTool	0	
10	955.10	0.38	320.58	95.72	955.08	0.01	3.86	-0.41	3.88	353.99	0.02	GyroTool	0	
11	1050.82	0.41	303.44	95.72	1050.80	-0.43	4.30	-0.39	4.39	348.25	0.13	GyroTool	0	
12	1146.54	0.32	306.38	95.72	1146.52	-0.89	4.64	-1.39	4.85	343.28	0.10	GyroTool	0	
13	1242.26	0.39	329.75	95.72	1242.24	-1.22	5.08	-1.77	5.38	340.76	0.17	GyroTool	0	
14	1337.98	0.33	334.59	95.72	1337.95	-1.44	5.61	-2.06	5.98	339.88	0.07	GyroTool	0	
15	1433.70	0.61	349.98	95.72	1433.67	-1.57	6.36	-2.26	6.75	340.42	0.32	GyroTool	0	
16	1529.42	0.52	332.32	95.72	1529.39	-1.76	7.25	-2.55	7.69	340.60	0.20	GyroTool	0	
17	1625.14	0.53	331.54	95.72	1625.10	-2.09	8.02	-2.97	8.55	339.71	0.01	GyroTool	0	
18	1720.86	0.51	326.48	95.72	1720.82	-2.45	8.77	-3.41	9.41	338.73	0.05	GyroTool	0	
19	1816.58	0.58	301.78	95.72	1816.53	-3.03	9.38	-4.06	9.88	336.59	0.25	GyroTool	0	
20	1912.30	0.60	276.95	95.72	1912.25	-3.90	9.69	-4.97	10.89	332.86	0.27	GyroTool	0	
21	2008.02	0.50	258.93	95.72	2007.97	-4.81	9.68	-5.88	11.32	328.73	0.21	GyroTool	0	
22	2103.74	0.45	250.92	95.72	2103.68	-5.59	9.47	-6.64	11.57	324.96	0.09	GyroTool	0	
23	2199.46	0.34	245.57	95.72	2199.40	-6.22	9.23	-7.26	11.74	321.84	0.12	GyroTool	0	
24	2295.18	0.25	244.04	95.72	2295.12	-6.69	9.02	-7.70	11.86	319.52	0.09	GyroTool	0	
25	2390.90	0.18	272.26	95.72	2390.84	-7.04	8.94	-8.04	12.02	318.03	0.13	GyroTool	0	
26	2486.62	0.16	301.18	95.72	2486.56	-7.29	9.01	-8.30	12.25	317.34	0.09	GyroTool	0	
27	2580.34	0.18	298.76	95.72	2582.28	-7.53	9.13	-8.56	12.52	316.86	0.04	GyroTool	0	
28	2678.06	0.08	297.55	95.72	2678.00	-7.72	9.22	-8.76	12.72	316.47	0.11	GyroTool	0	
29	2773.78	0.23	23.20	95.72	2773.72	-7.68	9.43	-8.74	12.86	317.16	0.25	GyroTool	0	
30	2865.50	0.48	24.85	95.72	2869.43	-7.38	9.97	-8.50	13.1	319.55	0.26	GyroTool	0	
31	2965.22	0.69	3.41	95.72	2965.15	-7.08	10.91	-8.30	13.7	322.74	0.31	GyroTool	0	
32	3060.94	0.78	0.32	95.72	3060.86	-6.91	12.13	-8.26	14.68	325.76	0.10	GyroTool	0	
33	3156.67	0.82	349.67	95.72	3156.57	-6.89	13.46	-8.38	15.85	328.10	0.16	GyroTool	0	
34	3252.38	0.78	343.98	95.72	3252.28	-7.05	14.76	-8.68	17.12	329.54	0.09	GyroTool	0	
35	3348.10	0.68	339.75	95.72	3348.00	-7.30	15.92	-9.06	18.31	330.36	0.12	GyroTool	0	
36	3443.82	0.46	316.34	95.72	3443.71	-7.67	16.73	-9.25	19.73	329.85	0.33	GyroTool	0	
37	3539.54	0.16	292.43	95.72	3539.43	-8.02	17.06	-9.91	19.73	329.85	0.33	GyroTool	0	
38	3635.26	0.38	210.86	95.72	3635.15	-8.33	16.84	-10.19	19.68	328.81	0.41	GyroTool	0	
39	3730.98	0.05	31.87	95.72	3730.87	-8.50	16.60	-10.33	19.55	328.10	0.45	GyroTool	0	
40	3826.70	0.28	41.68	95.72	3826.59	-8.30	16.81	-10.16	19.64	328.86	0.24	GyroTool	0	
41	3922.16	0.42	4.63	95.46	3922.05	-8.06	17.33	-9.97	20	330.08	0.27	GyroTool	0	
42	4017.28	0.48	321.79	95.12	4017.16	-8.20	17.99	-10.19	20.68	330.47	0.35	GyroTool	0	
43	4112.92	0.28	281.14	95.98	4113.14	-8.64	18.35	-10.67	21.23	329.83	0.34	GyroTool	0	
44	4209.24	0.10	292.41	95.98	4209.12	-8.94	18.43	-10.98	21.45	329.22	0.19	GyroTool	0	
45	4305.22	0.69	110.90	95.98	4305.10	-8.50	18.26	-10.51	21.07	330.06	0.82	GyroTool	0	
46	4400.10	1.57	93.79	94.88	4399.96	-6.71	17.97	-8.68	19.96	334.70	0.98	GyroTool	0	
47	4496.77	1.70	66.74	95.67	4495.59	-4.06	18.44	-6.07	19.42	341.27	0.81	GyroTool	0	
48	4591.62	1.69	59.74	95.85	4591.40	-1.41	19.71	-3.55	20.03	349.80	0.22	GyroTool	0	
49	4687.39	1.66	52.12	95.77	4687.13	1.06	21.28	-1.23	21.31	356.69	0.33	GyroTool	0	
50	4783.16	1.56	41.60	95.77	4782.86	3.20	23.10	0.73	23.12	1.81	0.33	GyroTool	0	
51	4828.00	1.52	23.45	44.84	4827.69	3.95	24.11	1.37	24.15	3.26	1.09	GyroTool	0	
52	5000.00	0.98	6.32	172.00	4999.64	5.99	27.66	2.44	29.29	5.04	0.38	SlimpPulse	0	
53	5095.00	0.89	19.68	95.00	5094.63	5.89	29.16	2.78	29.29	5.44	0.25	SlimpPulse	0	
54	5191.00	0.94	37.05	96.00	5190.62	6.75	30.49	3.50	30.69	6.56	0.29	SlimpPulse	0	
55	5287.00	1.73	65.03	96.00	5286.59	8.66	31.73	5.29	31.17	9.47	1.04	SlimpPulse	0	
56	5383.00	2.89	75.25	96.00	5382.51	12.43	32.96	8.95	34.15	15.19	1.28	SlimpPulse	0	
57	5476.00	4.07	77.56	93.00	5475.34	18.02	34.27	14.44	37.18	22.84	1.28	SlimpPulse	0	
58	5572.00	5.31	87.46	96.00	5571.02	25.84	35.20	22.20	41.61	32.24	1.54	SlimpPulse	0	
59	5668.00	6.42	86.75	96.00	5666.52	35.63	35.70	31.99	47.93	41.86	1.16	SlimpPulse	0	
60	5764.00	6.86	85.18	96.00	5761.87	46.72	36.48	43.05	56.43	49.72	0.50	SlimpPulse	0	
61	5860.00	6.22	84.13	96.00	5857.25	57.64	37.49	53.94	65.69	55.19	0.68	SlimpPulse	0	
62	5956.00	5.96	83.37	96.00	5952.71	67.83	38.60	64.06	74.79	65.93	0.28	SlimpPulse	0	
63	6051.00	6.00	87.17	95.00	6047.19	77.72	39.42	73.92	83.78	61.93	0.42	SlimpPulse	0	
64	6146.00	6.60	97.27	95.00	6141.62	87.99	38.97	84.30	92.87	65.19	1.33	SlimpPulse	0	
65	6242.00	6.65	95.32	96.00	6236.98	98.81	37.76	95.31	102.52	68.39	0.24	SlimpPulse	0	
66	6338.00	6.73	93.46	96.00	6332.32	109.81	36.90	106.47	112.68	70.88	0.24	SlimpPulse	0	
67	6433.00	6.63	92.09	95.00	6426.68	120.73	36.36	117.51	123.01	72.81	0.20	SlimpPulse	0	
68	6529.00	6.41	90.64	96.00	6522.06	131.55	36.10	128.42	133.39	74.30	0.29	SlimpPulse	0	
69	6623.00	6.31	89.73	94.00	6615.48	141.89	36.07	138.83	143.44	75.44	0.16	SlimpPulse	0	

70	6718.00	6.61	87.47	95.00	6709.87	152.54	36.33	149.50	153.86	76.34	0.41	SlimPulse	0
71	6814.00	6.43	93.19	96.00	6805.25	163.35	36.28	160.39	164.44	77.26	0.70	SlimPulse	0
72	6910.00	6.40	93.41	96.00	6900.65	173.93	35.66	171.09	174.77	78.23	0.04	SlimPulse	0
73	7005.00	6.63	93.31	95.00	6995.04	184.56	35.03	181.85	185.19	79.10	0.24	SlimPulse	0
74	7101.00	7.02	92.28	96.00	7090.36	195.82	34.48	193.24	196.29	79.88	0.42	SlimPulse	0
75	7197.00	6.81	91.55	96.00	7185.66	207.26	34.09	204.79	207.61	80.55	0.23	SlimPulse	0
76	7293.00	6.33	92.40	96.00	7281.03	218.14	33.71	215.77	218.39	81.12	0.51	SlimPulse	0
77	7388.00	6.23	94.41	95.00	7375.46	228.39	33.10	226.15	228.56	81.67	0.26	SlimPulse	0
78	7484.00	5.68	94.64	96.00	7470.94	238.18	32.31	236.08	238.28	82.21	0.57	SlimPulse	0
79	7580.00	5.55	93.47	96.00	7566.48	247.42	31.65	245.44	247.47	82.65	0.18	SlimPulse	0
80	7676.00	5.22	92.31	96.00	7662.06	256.31	31.19	254.43	256.34	83.01	0.36	SlimPulse	0
81	7771.00	5.28	90.26	95.00	7756.66	264.93	30.99	263.12	264.94	83.28	0.21	SlimPulse	0
82	7867.00	4.58	91.52	96.00	7852.31	273.11	30.87	271.36	273.12	83.51	0.74	SlimPulse	0
83	7962.00	4.10	94.15	95.00	7947.03	280.21	30.53	278.54	280.21	83.75	0.54	SlimPulse	0
84	8058.00	3.34	102.57	96.00	8042.83	286.24	29.67	284.70	286.25	84.05	0.97	SlimPulse	0
85	8153.00	3.53	96.59	95.00	8137.66	291.72	28.73	290.32	291.73	84.35	0.42	SlimPulse	0
86	8249.00	3.66	88.66	96.00	8233.47	297.65	28.46	296.31	297.67	84.51	0.53	SlimPulse	0
87	8344.00	3.46	92.28	95.00	8328.29	303.50	28.42	302.20	303.53	84.63	0.32	SlimPulse	0
88	8440.00	3.30	98.07	96.00	8424.12	309.04	27.92	307.82	309.09	84.82	0.39	SlimPulse	0
89	8535.00	3.14	96.74	95.00	8518.97	314.22	27.23	313.11	314.29	85.03	0.18	SlimPulse	0
90	8631.00	2.27	106.21	96.00	8614.87	318.54	26.39	317.54	318.64	85.25	1.01	SlimPulse	0
91	8725.00	1.90	115.71	94.00	8708.80	321.59	25.19	320.74	321.73	85.51	0.54	SlimPulse	0
92	8819.00	1.24	88.70	94.00	8802.77	323.93	24.54	323.16	324.09	85.66	1.04	SlimPulse	0
93	8914.00	1.00	78.88	95.00	8897.75	325.77	24.72	325.00	325.93	85.65	0.32	SlimPulse	0
94	9010.00	0.93	82.80	96.00	8993.74	327.38	24.98	326.58	327.54	85.63	0.10	SlimPulse	0
95	9106.00	0.69	88.72	96.00	9089.73	328.73	25.09	327.93	328.89	85.62	0.26	SlimPulse	0
96	9202.00	0.83	104.39	96.00	9185.72	329.95	24.93	329.18	330.12	85.67	0.26	SlimPulse	0
97	9298.00	1.40	96.68	96.00	9281.70	331.75	24.62	331.01	331.93	85.75	0.62	SlimPulse	0
98	9393.00	0.29	298.44	95.00	9376.69	332.68	24.60	331.96	332.87	85.76	1.77	SlimPulse	0
99	9489.00	0.66	224.95	96.00	9472.69	332.05	24.33	331.35	332.24	85.80	0.67	SlimPulse	0
100	9585.00	0.94	203.22	96.00	9568.68	331.23	23.21	330.65	331.46	85.98	0.42	SlimPulse	0
101	9681.00	2.13	248.62	96.00	9664.65	329.13	21.84	328.68	329.4	86.20	1.69	SlimPulse	0
102	9777.00	3.83	250.09	96.00	9760.51	324.29	20.10	324.00	324.63	86.45	1.76	SlimPulse	0
103	9873.00	4.57	255.19	96.00	9856.26	317.40	18.03	317.29	317.81	86.75	0.87	SlimPulse	0
104	9968.00	3.89	272.13	95.00	9951.00	310.47	17.19	310.41	310.89	86.83	1.49	SlimPulse	0
105	10064.00	2.05	280.51	96.00	10046.87	305.60	17.62	305.47	305.98	86.70	1.97	SlimPulse	0
106	10159.00	0.73	300.80	95.00	10141.84	303.49	18.24	303.29	303.83	86.56	1.46	SlimPulse	0
107	10255.00	0.90	25.36	96.00	10237.83	303.40	19.23	303.09	303.7	86.37	1.15	SlimPulse	0
108	10350.00	0.43	48.87	95.00	10332.83	304.08	20.14	303.67	304.34	86.21	0.57	SlimPulse	0
109	10446.00	0.11	172.84	96.00	10428.82	304.38	20.29	303.95	304.63	86.18	0.51	SlimPulse	0
110	10542.00	0.63	219.40	96.00	10524.82	304.00	19.79	303.63	304.27	86.27	0.59	SlimPulse	0
111	10638.00	1.07	216.25	96.00	10620.81	303.02	18.65	302.76	303.33	86.47	0.46	SlimPulse	0
112	10734.00	1.22	220.74	96.00	10716.79	301.67	17.16	301.57	302.05	86.74	0.18	SlimPulse	0
113	10830.00	1.29	221.02	96.00	10812.77	300.13	15.57	300.19	300.6	87.03	0.08	SlimPulse	0
114	10923.00	1.11	204.95	93.00	10905.75	298.90	13.96	299.12	299.45	87.33	0.41	SlimPulse	0
115	11019.00	1.07	241.43	96.00	11001.73	297.59	12.69	297.94	298.21	87.56	0.71	SlimPulse	0
116	11115.00	1.78	220.29	96.00	11097.70	295.68	11.12	296.19	296.4	87.85	0.91	SlimPulse	0
117	11210.00	1.38	197.98	95.00	11192.67	294.14	8.90	294.88	295.02	88.27	0.76	SlimPulse	0
118	11306.00	1.34	220.20	96.00	11288.64	292.85	6.94	293.80	293.88	88.65	0.55	SlimPulse	0
119	11318.00	1.34	222.76	12.00	11300.64	292.64	6.73	293.61	293.69	88.69	0.50	SlimPulse	0
120	11368.00	1.34	222.76	50.00	11350.62	291.76	5.87	292.82	292.88	88.85	0.01	rejection to t	7

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

HOBBS OCD

FEB 04 2013

RECEIVED

September 27, 2012

Cimarex

600 N MARIENFELD STREET SUITE 600

MIDLAND, TX 79701

HOBBS OCD

FEB 04 2013

RECEIVED

Re:

CLIENT: Cimarex Energy Co.
WELL: Triste Draw 36 State #006 ST01
FIELD: Triste Draw
RIG: Cactus 104
COUNTY: Lea New Mexico
API NO: 30-025-40578-01
JOB NO: 12MLD0360

D-36-23S-32E 695 FNL 375 FWL
N 32.266559 W 103.63562

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation.
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Connor Ferguson MWD	Triste Draw 36 State #006 ST01 Side Track	10509.00 Ft to 14984.00 Ft	July 20, 2012 to July 28, 2012	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.

Sincerely,


Chad McMillan
Field Service Manager

SUR: D-36-23s-32e, 695/N & 375/W
BHL: M-36-23s-32e, 4938/N & 690/W
API # 30-025-40578

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

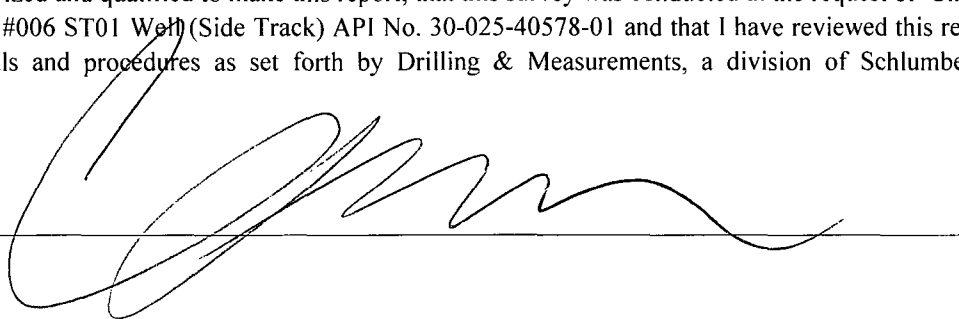
Well Reference:

Sec 8 T17S R31E NWNW Lot D 905FNL 900FWL

N 32.266559 W 103.63562

I, Connor Ferguson certify that; I am employed by Drilling & Measurements (formerly Anadrill), a division of Schlumberger Technology Corporation; that I did on the day(s) of July 20, 2012 through July 28, 2012, conduct or supervise the taking of the SlimPulse surveys from a depth of 10509.00 feet to a depth of 14984.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Cimarex Energy Co. for the Triste Draw 36 State #006 ST01 Well (Side Track) API No. 30-025-40578-01 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Connor Ferguson(signature)
MWD



Subscribed and Sworn to before me this _____ day of _____ (month) _____ (yr)

My Commission expires:

Notary Public (signature)

(County State)

30-025-40578 TRISTE DRAW 36 STATE #006 [38694]**General Well Information****Status:** New (Not Drilled or Completed)

Well Type: Oil
 Work Type: New
 Surface Location: D-36-23S-32E 695 FNL 375 FWL
 Lat/Long: 32.2665587756432 -103.635623402041
 GL Elevation: 3692

Direction:
 Lease Type: State

Sing/Mult Compl:
 Potash Waiver:

Proposed Formation and/or Notes

2nd Bone Spring Sand

Depths

Proposed: 15242

Measured: 0
 Plugback Measured:

Formation Tops

Formation	Top	Method Obtained
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Event Dates

Initial APD Approval: 5/18/2012
 Most Recent APD Approval: 5/18/2012
 APD Cancellation:
 APD Extension Approval:
 Spud: 12/31/9999
 Approved Temporary Abandonment:
 Shut In Waiting For Pipeline:
 Plug and Abandoned Intent Received:
 Well Plugged:
 Site Release:
 Last Inspection: 7/5/2012

Current APD Expiration: 5/18/2014

Expiration:

Plugged, Not Released
 Expiration:
 Intention To Plug:
 Last MIT:

History

Effective Date	Property	Operator	C-101 Work Type	Well Type
5/18/2012	[38694] TRISTE DRAW 36 STATE	[215099] CIMAREX ENERGY CO.	N	Oil

Comments

Date/Time	User Id	Comment
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Operator

Company: [215099] CIMAREX ENERGY CO.
 Address: 600 N MARIENFELD STREET SUITE 600
 MIDLAND, TX 79701
 Country:
 Main Phone:

Central Contact Person

No district contact found.

Pits**Casing****Well Completions**

[96603] TRISTE DRAW;BONE SPRING**Status: New, Not Drilled****Last Produced:****Financial Assurance****Compliance**

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Rep](#))

Also note that some compliance issues are addressed at the operator level so not listed under each well.

Complaints, Incidents and Spills

No Incidents Found

Please note that incidents that impact ground water are recorded along with "facilities" which may not be wells, so although the initial report may be related to the abatement plans, remediation plans and ground water impact information are not yet part of this application.

Orders

No Orders Found

Production / Injection[Show All Data](#)

Earliest Production in OCD Records:					Last				
Time Frame	Production				Injection				
	Oil(BBLS)	Gas (MCF)	Water (BBLS)	Days P/I	Water (BBLS)	Co2 (MCF)	Gas (MCF)	Other	Pressure
Grand Total:	0	0	0	0	0	0	0	0	0

Transporters

Transporter	Product
[21778] SUNOCO INC (R&M)	Oil
[36785] DCP MIDSTREAM, LP	Gas

SCHLUMBERGER

Survey Report

16-Aug-2012

Client.....: Cimarex Energy Co.
Field.....: Triste Draw

Well.....: Triste Draw 36 State #006 ST01
API number.....: 30-025-40578
Engineer.....: Connor Ferguson

Spud date.....: 26-Jun-12
Last survey date.....: 28-Jul-12
Total accepted surveys.....: 66
MD of first survey.....: 10509.00 ft
MD of last survey.....: 14984.00 ft

County.....: Lea
State.....: New Mexico
Rig.....: Cactus 104

Latitude.....: 32° 15' 59.599" N
Longitude.....: 103° 38' 8.298" W

---- Survey calculation methods-----

Method for positions...: Minimum curvature
Method for DLS.....: Lubinski

---- Depth reference -----

Permanent datum.....: MSL
Depth reference.....: Driller's Depth
GL above permanent.....: 3692.00
KB above permanent.....: 3713.00
DF above permanent.....: 3713.00

---- Vertical section origin-----

Latitude (+N/S-).....: 0.00 ft
Departure (+E/W-).....: 0.00 ft

---- Grid Coordinates -----

NAD27 Texas State Plane, Central Zone, US Feet
X.....: 756988.90 ft
Y.....: 461406.90 ft

Azimuth from Vsect Origin to target: 175.77 degrees

-----MWD Survey Reference Criteria-----

----Run1---- Calculation Date: 18-Jul-2012

Location G.....: 998.94325 mgn Tolerance G...: 2.50 mgn
Location B.....: 48521.29 nT Tolerance B...: 300.00 nT
Magnetic Dip: 60.1446 degrees Tolerance Dip: 0.45 degrees

----Run2---- Calculation Date: 24-Jul-2012

Location G.....: 998.94325 mgn Tolerance G...: 2.50 mgn
Location B.....: 48519.25 nT Tolerance B...: 300.00 nT
Magnetic Dip: 60.1438 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2011

----Run1-----

Magnetic dec (+E/W-).....: 7.5677 degrees
Grid Conv (+E/W-).....: 0.3677 degrees
Total Azim Corr (+E/W-)...: 7.2 degrees

----Run2-----

Magnetic dec (+E/W-).....: 7.5659 degrees
Grid Conv (+E/W-).....: 0.3759 degrees
Total Azim Corr (+E/W-)...: 7.19 degrees

-----Survey Correction Index Description-----

0 = Uncorrected 1 = Sag Corrected

2 = DMAG Corrected 3 = Sag + DMAG Corrected

===== Survey List =====													
Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/-S (ft)	E/-W (ft)	Closure (ft)	at Azi (deg)	DLS (deg/100ft)	Tool	Correction
1	0.00	0.00	0.00	-999.25	0.00	0.00	0.00	0.00	0	90.00	0.00	TIP	0
2	100.00	0.40	89.83	100.00	100.00	0.02	0.00	0.35	0.35	89.83	0.40	SingleShot	0
3	200.00	0.41	73.59	100.00	200.00	-0.03	0.10	1.04	1.05	84.34	0.11	SingleShot	0
4	300.00	0.40	8.09	100.00	299.99	-0.44	0.55	1.43	1.54	69.02	0.44	SingleShot	0
5	400.00	0.19	355.24	100.00	399.99	-0.95	1.06	1.47	1.81	54.17	0.22	SingleShot	0
6	572.22	0.32	332.72	172.22	572.21	-1.68	1.77	1.22	2.15	34.64	0.09	SingleShot	0
7	667.94	0.38	318.49	95.72	667.93	-2.18	2.25	0.89	2.42	21.64	0.11	SingleShot	0
8	763.66	0.46	321.82	95.72	763.65	-2.75	2.79	0.44	2.82	9.05	0.09	SingleShot	0
9	859.38	0.40	322.01	95.72	859.36	-3.34	3.35	0.00	3.35	0.02	0.06	SingleShot	0
10	955.10	0.38	320.58	95.72	955.08	-3.88	3.86	-0.41	3.88	353.99	0.02	SingleShot	0
11	1050.82	0.41	303.44	95.72	1050.80	-4.35	4.30	-0.89	4.39	348.25	0.13	SingleShot	0

12	1146.54	0.32	306.38	95.72	1146.52	-4.73	4.64	-1.39	4.85	343.28	0.10	SingleShot	0
13	1242.26	0.39	329.75	95.72	1242.24	-5.20	5.08	-1.77	5.38	340.76	0.17	SingleShot	0
14	1337.98	0.33	334.59	95.72	1337.95	-5.75	5.61	-2.06	5.98	339.88	0.07	SingleShot	0
15	1433.70	0.61	349.98	95.72	1433.67	-6.51	6.36	-2.26	6.75	340.42	0.32	SingleShot	0
16	1529.42	0.52	332.32	95.72	1529.39	-7.42	7.25	-2.55	7.69	340.60	0.20	SingleShot	0
17	1625.14	0.53	331.54	95.72	1625.10	-8.22	8.02	-2.97	8.55	339.71	0.01	SingleShot	0
18	1720.86	0.51	326.48	95.72	1720.82	-9.00	8.77	-3.41	9.41	338.73	0.05	SingleShot	0
19	1816.58	0.58	301.78	95.72	1816.53	-9.65	9.38	-4.06	10.22	336.59	0.25	SingleShot	0
20	1912.30	0.60	276.95	95.72	1912.25	-10.03	9.69	-4.97	10.89	332.86	0.27	SingleShot	0
21	2008.02	0.50	258.93	95.72	2007.97	-10.08	9.68	-5.88	11.32	328.73	0.21	SingleShot	0
22	2103.74	0.45	250.92	95.72	2103.68	-9.94	9.47	-6.64	11.57	324.96	0.09	SingleShot	0
23	2199.46	0.34	245.57	95.72	2199.40	-9.74	9.23	-7.26	11.74	321.84	0.12	SingleShot	0
24	2295.18	0.25	244.04	95.72	2295.12	-9.57	9.02	-7.70	11.86	319.52	0.09	SingleShot	0
25	2390.90	0.18	272.26	95.72	2390.84	-9.51	8.94	-8.04	12.02	318.03	0.13	SingleShot	0
26	2486.62	0.16	301.18	95.72	2486.56	-9.60	9.01	-8.30	12.25	317.34	0.09	SingleShot	0
27	2582.34	0.18	290.76	95.72	2582.28	-9.74	9.13	-8.56	12.52	316.86	0.04	SingleShot	0
28	2678.06	0.08	297.55	95.72	2678.00	-9.84	9.22	-8.76	12.72	316.47	0.11	SingleShot	0
29	2773.78	0.23	23.20	95.72	2773.72	-10.05	9.43	-8.74	12.86	317.16	0.25	SingleShot	0
30	2869.50	0.48	24.85	95.72	2869.43	-10.57	9.97	-8.50	13.1	319.55	0.26	SingleShot	0
31	2965.22	0.69	3.41	95.72	2965.15	-11.49	10.91	-8.30	13.7	322.74	0.31	SingleShot	0
32	3060.94	0.78	0.32	95.72	3060.86	-12.71	12.13	-8.26	14.68	325.76	0.10	SingleShot	0
33	3156.66	0.82	349.67	95.72	3156.57	-14.04	13.46	-8.38	15.85	328.10	0.16	SingleShot	0
34	3252.38	0.78	343.98	95.72	3252.28	-15.36	14.76	-8.68	17.12	329.54	0.09	SingleShot	0
35	3348.10	0.68	339.75	95.72	3348.00	-16.54	15.92	-9.06	18.31	330.36	0.12	SingleShot	0
36	3443.82	0.46	316.34	95.72	3443.71	-17.38	16.73	-9.52	19.25	330.36	0.33	SingleShot	0
37	3539.54	0.16	292.43	95.72	3539.43	-17.74	17.06	-9.91	19.73	329.85	0.33	SingleShot	0
38	3635.26	0.38	210.86	95.72	3635.15	-17.54	16.84	-10.19	19.68	328.81	0.41	SingleShot	0
39	3730.98	0.05	31.87	95.72	3730.87	-17.32	16.60	-10.33	19.55	328.10	0.45	SingleShot	0
40	3826.70	0.28	41.68	95.72	3826.59	-17.51	16.81	-10.16	19.64	328.86	0.24	SingleShot	0
41	3922.16	0.42	4.63	95.46	3922.05	-18.02	17.33	-9.97	20	330.08	0.27	SingleShot	0
42	4017.28	0.48	321.79	95.12	4017.16	-18.70	17.99	-10.19	20.68	330.47	0.35	SingleShot	0
43	4113.26	0.28	281.14	95.98	4113.14	-19.09	18.35	-10.67	21.23	329.83	0.34	SingleShot	0
44	4209.24	0.10	292.41	95.98	4209.12	-19.19	18.43	-10.98	21.45	329.22	0.19	SingleShot	0
45	4305.22	0.69	110.90	95.98	4305.10	-18.98	18.26	-10.51	21.07	330.06	0.82	SingleShot	0
46	4400.10	1.57	93.79	94.88	4399.96	-18.56	17.97	-8.68	19.96	334.20	0.98	SingleShot	0
47	4495.77	1.70	66.74	95.67	4495.59	-18.84	18.44	-6.07	19.42	341.77	0.81	SingleShot	0
48	4591.62	1.69	59.74	95.85	4591.40	-19.92	19.71	-3.55	20.03	349.80	0.22	SingleShot	0
49	4687.39	1.66	52.12	95.77	4687.13	-21.31	21.28	-1.23	21.31	356.69	0.23	SingleShot	0
50	4783.16	1.56	41.60	95.77	4782.86	-22.99	23.10	0.73	23.12	1.81	0.33	SingleShot	0
51	4828.00	1.52	23.45	44.84	4827.69	-23.94	24.11	1.37	24.15	3.26	1.09	SingleShot	0
52	5000.00	0.98	6.32	172.00	4999.64	-27.41	27.66	2.44	27.77	5.04	0.38	SlimPulse	0
53	5095.00	0.89	19.68	95.00	5094.63	-28.88	29.16	2.78	29.3	5.44	0.25	SlimPulse	0
54	5191.00	0.94	37.05	96.00	5190.62	-30.15	30.49	3.50	30.69	6.56	0.29	SlimPulse	0
55	5287.00	1.73	65.03	96.00	5286.59	-31.26	31.73	5.29	32.17	9.47	1.04	SlimPulse	0
56	5383.00	2.89	75.25	96.00	5382.51	-32.21	32.96	8.95	34.15	15.19	1.28	SlimPulse	0
57	5476.00	4.07	77.56	93.00	5475.34	-33.11	34.27	14.44	37.19	22.84	1.28	SlimPulse	0
58	5572.00	5.31	87.46	96.00	5571.02	-33.47	35.20	22.20	41.62	32.24	1.54	SlimPulse	0
59	5668.00	6.42	86.75	96.00	5666.52	-33.24	35.70	32.00	47.94	41.87	1.16	SlimPulse	0
60	5764.00	6.86	85.18	96.00	5761.87	-33.21	36.49	43.07	56.45	49.73	0.50	SlimPulse	0
61	5860.00	6.22	84.13	96.00	5857.25	-33.42	37.50	53.96	65.71	55.20	0.68	SlimPulse	0
62	5956.00	5.96	83.37	96.00	5952.70	-33.78	38.61	64.08	74.81	58.93	0.28	SlimPulse	0
63	6051.00	6.00	87.17	95.00	6047.19	-33.86	39.42	73.94	83.79	61.93	0.42	SlimPulse	0
64	6146.00	6.60	97.27	95.00	6141.62	-32.65	38.98	84.31	92.89	65.19	1.32	SlimPulse	0
65	6242.00	6.65	95.32	96.00	6236.98	-30.63	37.76	95.32	102.53	68.39	0.24	SlimPulse	0
66	6338.00	6.73	93.46	96.00	6332.32	-28.96	36.91	106.47	112.69	70.88	0.24	SlimPulse	0
67	6433.00	6.63	92.09	95.00	6426.68	-27.61	36.37	117.51	123.01	72.80	0.20	SlimPulse	0
68	6529.00	6.41	90.64	96.00	6522.06	-26.54	36.11	128.40	133.39	74.29	0.29	SlimPulse	0
69	6623.00	6.31	89.73	94.00	6615.48	-25.74	36.08	138.82	143.43	75.43	0.15	SlimPulse	0
70	6718.00	6.61	87.47	95.00	6709.87	-25.22	36.34	149.50	153.85	76.34	0.41	SlimPulse	0
71	6814.00	6.43	93.19	96.00	6805.25	-24.36	36.29	160.39	164.44	77.25	0.70	SlimPulse	0
72	6910.00	6.40	93.41	96.00	6900.65	-22.95	35.67	171.10	174.77	78.22	0.04	SlimPulse	0
73	7005.00	6.63	93.31	95.00	6995.04	-21.53	35.04	181.86	185.2	79.09	0.24	SlimPulse	0
74	7101.00	7.02	92.28	96.00	7090.36	-20.14	34.49	193.25	196.3	79.88	0.43	SlimPulse	0
75	7197.00	6.81	91.55	96.00	7185.66	-18.90	34.10	204.80	207.62	80.55	0.24	SlimPulse	0
76	7293.00	6.33	92.40	96.00	7281.03	-17.71	33.72	215.78	218.4	81.12	0.51	SlimPulse	0
77	7388.00	6.23	94.41	95.00	7375.46	-16.34	33.11	226.15	228.56	81.67	0.25	SlimPulse	0
78	7484.00	5.68	94.64	96.00	7470.94	-14.82	32.32	236.08	238.28	82.20	0.57	SlimPulse	0
79	7580.00	5.55	93.47	96.00	7566.48	-13.47	31.66	245.45	247.48	82.65	0.18	SlimPulse	0
80	7676.00	5.22	92.31	96.00	7662.06	-12.35	31.20	254.45	256.35	83.01	0.36	SlimPulse	0
81	7771.00	5.28	90.26	95.00	7756.66	-11.51	31.01	263.14	264.96	83.28	0.21	SlimPulse	0
82	7867.00	4.58	91.52	96.00	7852.30	-10.78	30.88	271.38	273.14	83.51	0.74	SlimPulse	0
83	7962.00	4.10	94.15	95.00	7947.03	-9.91	30.54	278.56	280.23	83.74	0.55	SlimPulse	0
84	8058.00	3.34	102.57	96.00	8042.83	-8.60	29.68	284.72	286.26	84.05	0.97	SlimPulse	0
85	8153.00	3.53	96.59	95.00	8137.66	-7.25	28.74	290.32	291.74	84.35	0.43	SlimPulse	0
86	8249.00	3.66	88.66	96.00	8233.47	-6.54	28.48	296.32	297.69	84.51	0.53	SlimPulse	0
87	8344.00	3.46	92.28	95.00	8328.29	-6.05	28.43	302.22	303.55	84.63	0.32	SlimPulse	0
88	8440.00	3.30	98.07	96.00	8424.12	-5.15	27.93	307.85	309.11	84.82	0.39	SlimPulse	0
89	8535.00	3.14	96.74	95.00	8518.97	-4.07	27.24	313.14	314.32	85.03	0.19	SlimPulse	0
90	8631.00	2.27	106.21	96.00	8614.86	-2.90	26.40	317.57	318.67	85.25	1.02	SlimPulse	0
91	8725.00	1.90	115.71	94.00	8708.80	-1.48	25.20	320.77	321.76	85.51	0.54	SlimPulse	0
92	8819.00	1.24	88.70	94.00	8802.77	-0.65	24.55	323.19	324.12	85.66	1.04	SlimPulse	0
93	8914.00	1.00	78.88	95.00	8897.75	-0.69	24.74	325.03	325.97	85.65	0.32	SlimPulse	0
94	9010.00	0.93	82.80	96.00	8993.73	-0.83	24.99	326.62	327.58	85.62	0.10	SlimPulse	0
95	9106.00	0.69	88.72	96.00	9089.72	-0.84	25.10	327.97	328.93	85.62	0.26	SlimPulse	0

96	9202.00	0.83	104.39	96.00	9185.72	-0.59	24.94	329.23	330.17	85.67	0.26	SlimPulse	0
97	9298.00	1.40	96.68	96.00	9281.70	-0.15	24.64	331.06	331.98	85.74	0.61	SlimPulse	0
98	9393.00	0.29	298.44	95.00	9376.69	-0.06	24.62	332.01	332.92	85.76	1.76	SlimPulse	0
99	9489.00	0.66	224.95	96.00	9472.69	0.17	24.34	331.40	332.29	85.80	0.67	SlimPulse	0
100	9585.00	0.94	203.22	96.00	9568.68	1.23	23.22	330.70	331.51	85.98	0.43	SlimPulse	0
101	9681.00	2.13	248.62	96.00	9664.64	2.46	21.85	328.73	329.45	86.20	1.68	SlimPulse	0
102	9777.00	3.83	250.09	96.00	9760.51	3.85	20.11	324.05	324.68	86.45	1.77	SlimPulse	0
103	9873.00	4.57	255.19	96.00	9856.25	5.42	18.04	317.34	317.85	86.75	0.86	SlimPulse	0
104	9968.00	3.89	272.13	95.00	9951.00	5.76	17.19	310.46	310.94	86.83	1.49	SlimPulse	0
105	10064.00	2.05	280.51	96.00	10046.86	4.96	17.63	305.52	306.03	86.70	1.96	SlimPulse	0
106	10159.00	0.73	300.80	95.00	10141.84	4.18	18.25	303.33	303.88	86.56	1.46	SlimPulse	0
107	10255.00	0.90	25.36	96.00	10237.83	3.17	19.24	303.12	303.73	86.37	1.15	SlimPulse	0
108	10350.00	0.43	48.87	95.00	10332.82	2.31	20.15	303.71	304.38	86.20	0.56	SlimPulse	0
109	10446.00	0.11	172.84	96.00	10428.82	2.18	20.29	304.00	304.67	86.18	0.52	SlimPulse	0
110	10509.00	6.00	146.21	63.00	10491.70	5.11	17.50	305.83	306.33	86.73	9.36	SlimPulse	0
111	10541.00	8.84	148.39	32.00	10523.43	8.75	14.01	308.05	308.37	87.40	8.93	SlimPulse	0
112	10573.00	12.94	153.17	32.00	10554.85	14.24	8.72	310.96	311.08	88.39	13.13	SlimPulse	0
113	10605.00	17.08	157.91	32.00	10585.75	22.03	1.16	314.35	314.35	89.79	13.47	SlimPulse	0
114	10637.00	20.54	164.94	32.00	10616.04	32.02	-8.62	317.57	317.69	91.55	12.92	SlimPulse	0
115	10669.00	24.27	173.55	32.00	10645.63	44.11	-20.58	319.77	320.43	93.68	15.49	SlimPulse	0
116	10701.00	28.04	177.98	32.00	10674.35	58.21	-34.64	320.78	322.64	96.16	13.27	SlimPulse	0
117	10733.00	31.80	179.90	32.00	10702.08	74.14	-50.59	321.06	325.02	98.96	12.10	SlimPulse	0
118	10765.00	34.31	181.44	32.00	10728.90	91.52	-68.04	320.85	327.98	101.97	8.27	SlimPulse	0
119	10797.00	36.28	182.30	32.00	10755.02	109.91	-86.52	320.24	331.72	105.12	6.36	SlimPulse	0
120	10829.00	39.64	182.81	32.00	10780.24	129.45	-106.18	319.36	336.55	108.39	10.54	SlimPulse	0
121	10861.00	43.05	183.74	32.00	10804.26	150.40	-127.28	318.14	342.66	111.81	10.82	SlimPulse	0
122	10893.00	46.66	182.95	32.00	10826.95	172.77	-149.81	316.83	350.46	115.31	11.43	SlimPulse	0
123	10925.00	49.32	183.14	32.00	10848.36	196.36	-173.55	315.57	360.14	118.81	8.33	SlimPulse	0
124	10955.00	49.78	182.80	30.00	10867.82	219.01	-196.35	314.38	370.66	121.99	1.76	SlimPulse	0
125	10986.00	51.96	182.72	31.00	10887.38	242.87	-220.37	313.22	382.98	125.13	7.01	SlimPulse	0
126	11018.00	56.19	182.81	32.00	10906.16	268.59	-246.25	311.97	397.45	128.28	13.22	SlimPulse	0
127	11050.00	59.03	183.61	32.00	10923.30	295.38	-273.22	310.46	413.56	131.35	9.12	SlimPulse	0
128	11082.00	62.09	183.08	32.00	10939.03	323.00	-301.04	308.84	431.28	134.27	9.69	SlimPulse	0
129	11114.00	65.28	183.29	32.00	10953.21	351.44	-329.67	307.24	450.65	137.02	9.99	SlimPulse	0
130	11145.00	68.23	182.46	31.00	10965.44	379.70	-358.12	305.82	470.93	139.50	9.80	SlimPulse	0
131	11177.00	70.56	180.89	32.00	10976.70	409.49	-388.05	304.94	493.53	141.84	8.62	SlimPulse	0
132	11209.00	72.61	179.22	32.00	10986.81	439.76	-418.41	304.92	517.73	143.92	8.11	SlimPulse	0
133	11241.00	76.43	178.62	32.00	10995.35	470.55	-449.24	305.50	543.28	145.78	12.05	SlimPulse	0
134	11272.00	80.61	179.02	31.00	11001.52	500.88	-479.61	306.13	568.98	147.45	13.54	SlimPulse	0
135	11304.00	84.22	179.91	32.00	11005.75	532.53	-511.32	306.42	596.11	149.07	11.61	SlimPulse	0
136	11335.00	86.28	179.98	31.00	11008.32	563.34	-542.21	306.45	622.82	150.53	6.67	SlimPulse	0
137	11363.00	90.65	180.52	28.00	11009.06	591.24	-570.19	306.33	647.27	151.75	15.72	SlimPulse	0
138	11427.00	92.61	180.61	64.00	11007.24	654.98	-634.16	305.70	704	154.26	3.07	SlimPulse	0
139	11523.00	89.00	181.30	96.00	11005.89	750.56	-730.12	304.10	790.92	157.39	3.83	SlimPulse	0
140	11619.00	88.62	181.23	96.00	11007.88	846.10	-826.08	301.98	879.54	159.92	0.40	SlimPulse	0
141	11714.00	88.93	180.68	95.00	11009.90	940.69	-921.04	300.40	968.79	161.94	0.66	SlimPulse	0
142	11810.00	88.97	180.25	96.00	11011.66	1036.35	-1017.02	299.62	1060.24	163.58	0.45	SlimPulse	0
143	11906.00	89.04	180.39	96.00	11013.33	1132.04	-1113.01	299.09	1152.49	164.96	0.16	SlimPulse	0
144	12002.00	88.42	180.61	96.00	11015.46	1227.69	-1208.98	298.24	1245.22	166.14	0.69	SlimPulse	0
145	12097.00	88.31	180.93	95.00	11018.17	1322.28	-1303.93	296.97	1337.32	167.17	0.35	SlimPulse	0
146	12192.00	88.86	179.73	95.00	11020.51	1416.95	-1398.90	296.42	1429.96	168.04	1.38	SlimPulse	0
147	12288.00	89.00	179.56	96.00	11022.29	1512.72	-1494.88	297.01	1524.1	168.76	0.23	SlimPulse	0
148	12383.00	89.76	178.95	95.00	11023.32	1607.53	-1589.87	298.24	1617.6	169.38	1.02	SlimPulse	0
149	12478.00	89.90	178.48	95.00	11023.60	1702.41	-1684.84	300.37	1711.41	169.89	0.52	SlimPulse	0
150	12574.00	89.73	177.52	96.00	11023.92	1798.33	-1780.78	303.72	1806.5	170.32	1.02	SlimPulse	0
151	12669.00	90.00	176.96	95.00	11024.15	1893.30	-1875.67	308.30	1900.84	170.67	0.65	SlimPulse	0
152	12764.00	89.59	176.59	95.00	11024.49	1988.29	-1970.52	313.64	1995.32	170.96	0.59	SlimPulse	0
153	12860.00	90.93	177.23	96.00	11024.06	2084.26	-2066.38	318.81	2090.83	171.23	1.55	SlimPulse	0
154	12955.00	91.99	176.45	95.00	11021.63	2179.21	-2161.20	324.05	2185.36	171.47	1.40	SlimPulse	0
155	13051.00	93.30	177.72	96.00	11017.20	2275.08	-2256.97	328.92	2280.81	171.71	1.90	SlimPulse	0
156	13146.00	92.51	179.52	95.00	11012.38	2369.84	-2351.81	331.20	2375.02	171.98	2.06	SlimPulse	0
157	13240.00	91.75	180.52	94.00	11008.88	2463.51	-2445.75	331.17	2468.07	172.29	1.34	SlimPulse	0
158	13335.00	90.79	181.28	95.00	11006.77	2558.11	-2540.71	329.67	2562.01	172.61	1.29	SlimPulse	0
159	13431.00	90.58	181.33	96.00	11005.62	2653.65	-2636.68	327.49	2656.94	172.92	0.22	SlimPulse	0
160	13526.00	90.45	181.44	95.00	11004.77	2748.19	-2731.65	325.19	2750.94	173.21	0.18	SlimPulse	0
161	13622.00	90.38	181.55	96.00	11004.08	2843.71	-2827.61	322.70	2845.97	173.49	0.13	SlimPulse	0
162	13718.00	89.07	181.52	96.00	11004.54	2939.22	-2923.57	320.13	2941.05	173.75	1.36	SlimPulse	0
163	13813.00	88.97	179.56	95.00	11006.16	3033.88	-3018.55	319.23	3035.38	173.96	2.07	SlimPulse	0
164	13909.00	88.86	179.03	96.00	11007.98	3129.68	-3114.53	320.41	3130.96	174.13	0.55	SlimPulse	0
165	14004.00	89.48	179.82	95.00	11009.35	3224.47	-3209.51	321.36	3225.56	174.28	1.05	SlimPulse	0
166	14100.00	90.10	178.42	96.00	11009.69	3320.30	-3305.50	322.84	3321.22	174.42	1.59	SlimPulse	0
167	14195.00	90.48	180.14	95.00	11009.21	3415.12	-3400.48	324.02	3415.89	174.56	1.85	SlimPulse	0
168	14291.00	91.34	180.09	96.00	11007.68	3510.83	-3496.47	323.83	3511.43	174.71	0.90	SlimPulse	0
169	14386.00	89.48	180.89	95.00	11007.00	3605.50	-3591.46	323.01	3605.96	174.86	2.13	SlimPulse	0
170	14481.00	90.31	180.29	95.00	11007.17	3700.16	-3686.45	322.03	3700.49	175.01	1.08	SlimPulse	0
171	14577.00	90.86	179.65	96.00	11006.19	3795.90	-3782.45	322.09	3796.14	175.13	0.88	SlimPulse	0
172	14672.00	90.07	180.67	95.00	11005.42	3890.62	-3877.44	321.83	3890.77	175.26	1.36	SlimPulse	0
173	14767.00	89.21	180.93	95.00	11006.02	3985.25	-3972.43	320.51	3985.34	175.39	0.95	SlimPulse	0
174	14863.00	88.42	180.99	96.00	11008.00	4080.83	-4068.39	318.90	4080.87	175.52	0.83	SlimPulse	0
175	14959.00	88.86	181.43	96.00	11010.28	4176.37	-4164.35	316.87	4176.38	175.65	0.65	SlimPulse	0
176	14984.00	89.04	181.28	25.00	11010.74	4201.25	-4189.33	316.28	4201.26	175.68	0.93	SlimPulse	0
177	15038.00	89.04	181.28	54.00	11011.64	4254.99	-4243.31	315.07	4254.99	175.75	0.01	rejection to t	7