Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1133998

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34633
Name: Source Energy MidCon LLC
Address 1: 1805 SHEA CENTER DR., STE 100
Address 2:
City: HIGHLANDS RANCH State: CO Zip: 80129 + _ _ _ _
Contact Person: Elizabeth Habermehl
Phone: (720) 763-3689
CONTRACTOR: License # 34826
Name: Pistol Drilling, LLC
Wellsite Geologist: Mike Poirer
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

03/09/2013	03/25/2013	05/13/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-191-22675-01-00
Spot Description:
E2 - SW - SW - SW Sec. 34 Twp. 31 S. R. 1 ☑ East ☐ West
330 Feet from ☐ North / ☑ South Line of Section
452 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)*, Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Sumner
Lease Name: T&C Zimmerman Well #: 34-14 -34-11H
Field Name: unknown
Producing Formation: Mississipian
Elevation: Ground: 1313 Kelly Bushing: 1330
Total Vertical Depth: 8060 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 340 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 700 ppm Fluid volume: 2000 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

AFFIDAVIT
I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
☑ **Confidentiality Requested**
Date: 06/10/2013
☑ **Confidential Release Date:** 06/10/2015
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 07/23/2013

1133998

Operator Name: Source Energy MidCon LLC Lease Name: T&C Zimmerman Well #: 34-14 -34-11H

Sec. 34 Twp. 31 S. R. 1 ☑ East ☐ West County: Sumner

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

see attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Mississipian	3592	KB

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	9.625	36	320	Class A	155	
Intermediate	8.75	7	29	3703	Class A	202	
Production	6.125	4.5	11.6	3664	Class A	300	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
____ Perforate ____ Protect Casing ____ Plug Back TD ____ Plug Off Zone	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:
	4	4007		☑ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 05/13/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0		3011		

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☑ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:
_____
_____

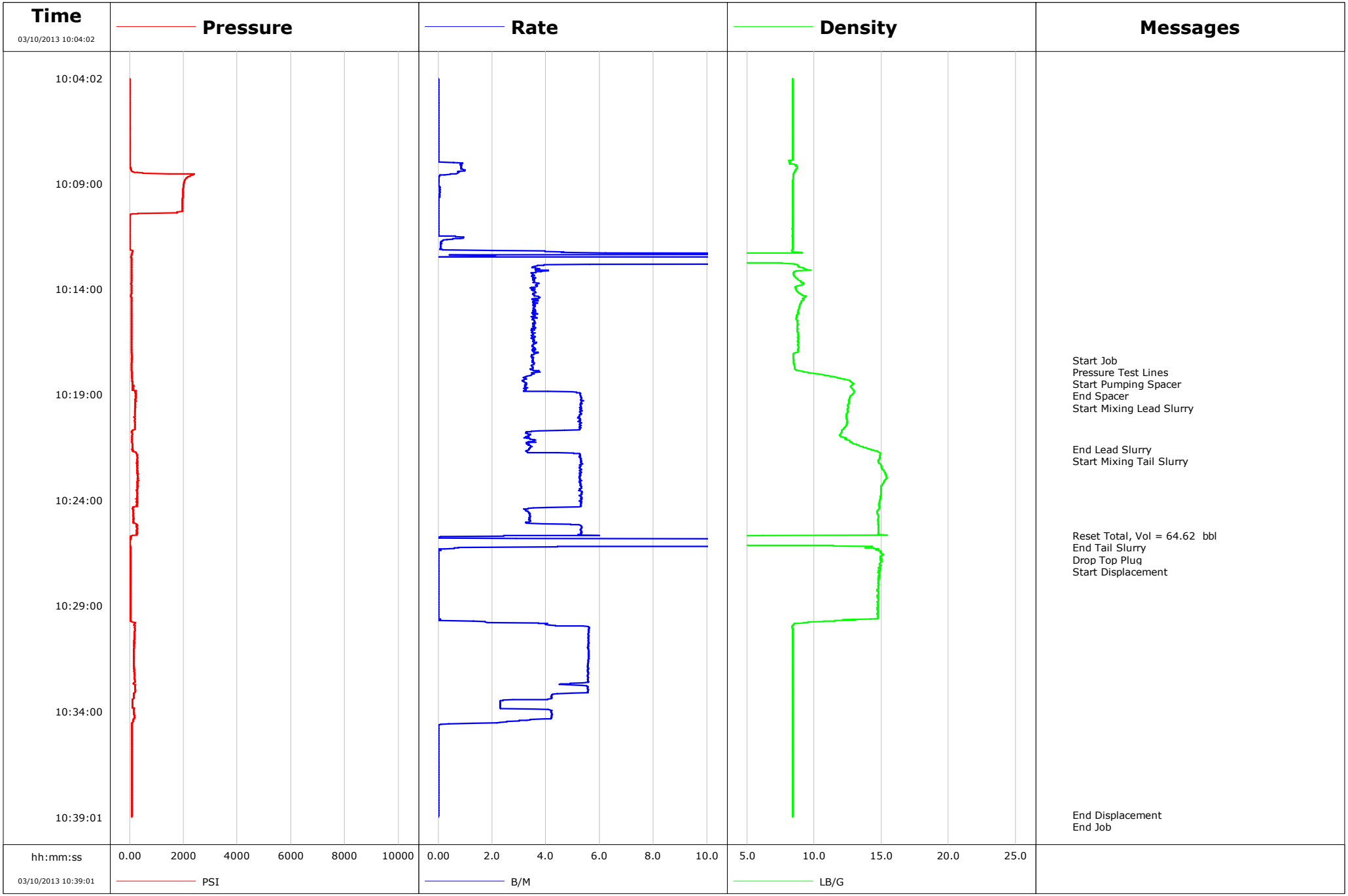
Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Schlumberger

Cementing Job Report

CemCAT v1.5

Well	ZIMMERMAN 34-14 34-11H	**Client**	SOURCE ENERGY
Field		**SIR No.**	944388
Engineer	NATHAN SMITH	**Job Type**	SURFACE
Country	United States	**Job Date**	03-10-2013



Schlumberger

Cementing Service Report

Customer	Job Number
SOURCE ENERGY	944388

Well	Location (legal)	Schlumberger Location	Job Start
ZIMMERMAN 34-14 34-11H		EL RENO	Mar/10/2013

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
		deg	in	32.0 ft	320.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
SUMNER	Kansas	psi	degF	degF	lb/gal
Well Master	**API/UWI**				

Rig Name	Drilled For	Service Via
	Oil & Gas	

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
	lb/gal	cP

Service Line	Job Type
Cementing	SURFACE

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	Single Cement head

Service Instructions

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
320.0	9.6	36.0	J55	8RD
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Casing	23.0 bbl		ft
Tubing Vol.	**Casing Vol.**	**Annular Vol.**	**Openhole Vol.**
bbl	bbl	bbl	bbl

Casing/Tubing Secured	☐	1 Hole Vol. Circulated prior to Cement	X
Lift Pressure	100 psi		
Pipe Rotated	☐	Pipe Reciprocated	☐
No. Centralizers	Top Plugs 1	Bottom Plugs	
Cement Head Type			

Job Scheduled For	Arrived on Location	Leave Location
Mar/10/2013	Mar/10/2013	Mar/10/2013

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	320.0 ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type		Tail Pipe Depth	ft
Collar Depth	ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/10/2013	10:04:02	0	0.0	8.42	0.0	Started Acquisition
03/10/2013	10:07:02	0	0.0	8.42	0.0	
03/10/2013	10:10:02	1388	0.0	8.41	0.5	
03/10/2013	10:13:02	737	3.6	9.25	11.6	
03/10/2013	10:16:02	461	3.5	8.75	22.3	
03/10/2013	10:17:23	399	3.5	8.47	27.1	Start Job
03/10/2013	10:17:25	75	3.5	8.47	27.2	Pressure Test Lines
03/10/2013	10:17:31	75	3.6	8.48	27.6	Start Pumping Spacer
03/10/2013	10:18:01	73	3.5	10.03	29.3	End Spacer
03/10/2013	10:18:07	74	3.4	11.01	29.7	Start Mixing Lead Slurry
03/10/2013	10:19:02	107	5.3	12.76	33.0	
03/10/2013	10:21:36	142	3.4	14.11	44.9	End Lead Slurry
03/10/2013	10:21:38	141	3.3	14.26	45.0	Start Mixing Tail Slurry
03/10/2013	10:22:02	149	5.3	14.88	46.8	
03/10/2013	10:25:02	188	3.4	14.76	61.4	
03/10/2013	10:25:41	193	6.0	6.15	64.6	Reset Total, Vol = 64.62 bbl
03/10/2013	10:25:44	192	0.1	1.06	64.8	End Tail Slurry
03/10/2013	10:25:45	192	0.1	0.14	64.8	Drop Top Plug
03/10/2013	10:28:02	181	0.0	14.80	73.9	
03/10/2013	10:31:02	178	5.6	8.41	80.5	
03/10/2013	10:34:02	175	4.2	8.40	95.1	

Well	Field	Job Start	Customer	Job Number
ZIMMERMAN 34-14 34-11H		Mar/10/2013	SOURCE ENERGY	944388

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/10/2013	10:38:54	157	0.0	8.41	97.2	End Displacement

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.8			5.0	37.0	0.0	20.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2403	78	201				bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
%	0.0 bbl	26.0 bbl	degF	X	5.0 bbl
				Washed Thru Perfs ☐	To ft

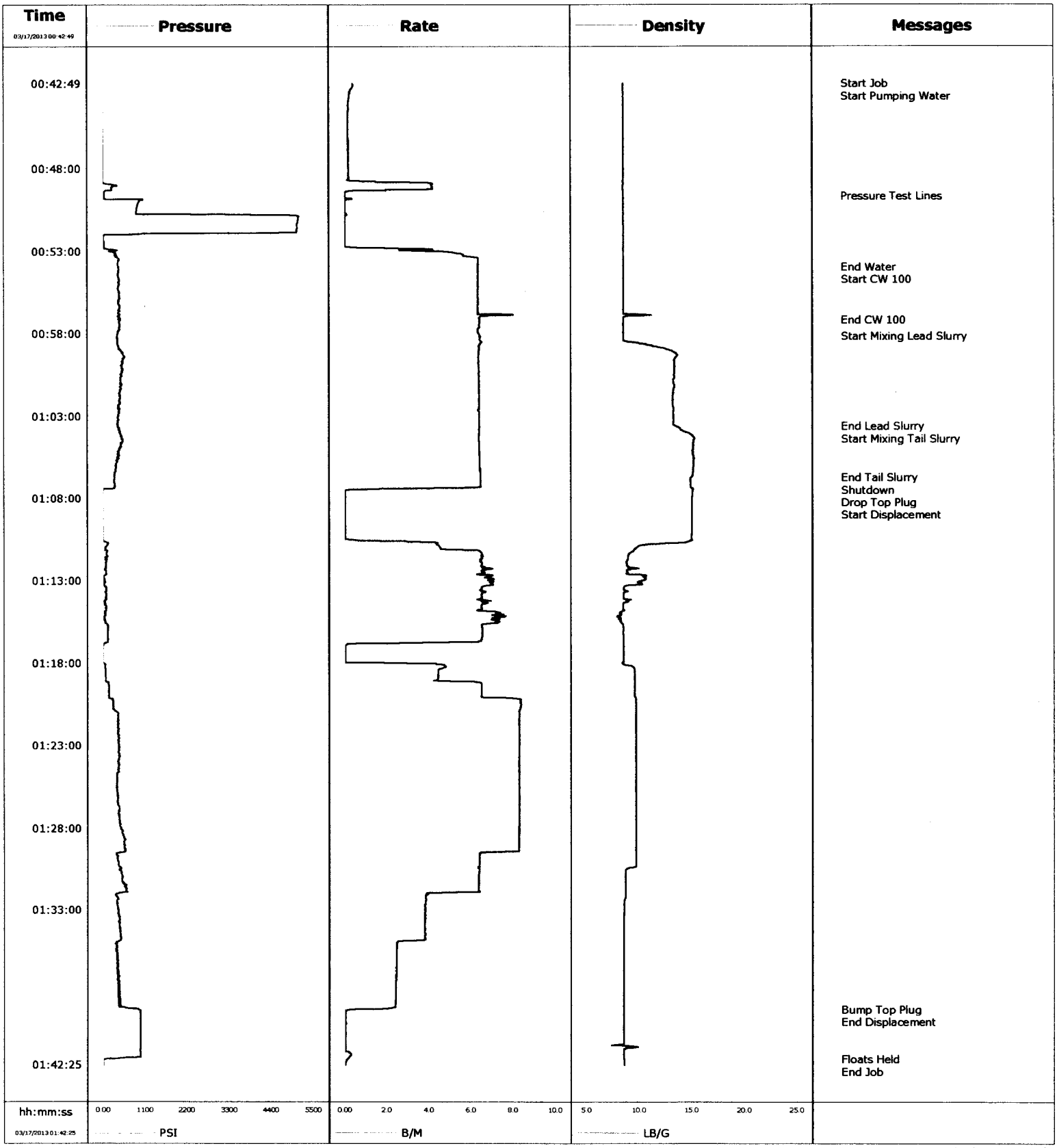
Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Charles Vallot / Peanut	NATHAN SMITH	-	X
		-	-

Schlumberger

Cementing Job Report

CemCAT v1.3

Well	Zimmerman 34-14-34-11J	**Client**	Source
Field		**SIR No.**	CIEW-00002
Engineer	Charles Jacobs	**Job Type**	7" Intermediate
Country	United States	**Job Date**	03-17-2013



03/17/2013 03:14:26

Schlumberger

Cementing Service Report

Customer	Source
Job Number	947972
Well	Zimmerman 34-14-34-11H
Location (legal)	
Schlumberger Location	Elreno
Job Start	Mar/17/2013
Field	
Formation Name/Type	
Deviation	
Bit Size	
Well MD	
Well TVD	
County	Summer
State/Province	Kansas
Well Master	0631451600
API/UWI	
BHP	
BHST	
BHCT	
Pore Press. Gradient	
Rig Name	Pistol #2
Drilled For	Oil & Gas
Service Via	Land
Offshore Zone	
Well Class	New
Well Type	Development
Drilling Fluid Type	
Max. Density	
Plastic Viscosity	
Service Line	Cementing
Job Type	Cem Interm Casing
Max. Allowed Tub. Press	
Max. Allowed Ann. Press	
WH Connection	
Service Instructions	

Casing/Liner

Depth,	Size,	Weight,	Grade	Thread

Tubing/Drill Pipe

Depth,	Size,	Weight,	Grade	Thread

Perforations/Open Hole

Top,	Bottom,		No. of Shots	Total Interval
				Diameter

Treat Down	Displacement	Packer Type	Packer Depth
Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.

Casing/Tubing Secured	☐	1 Hole Vol. Circulated prior to Cement	☒
Lift Pressure	343 psi		
Pipe Rotated	☐	Pipe Reciprocated	☐
No. Centralizers	26	Top Plugs	1
Bottom Plugs	0		
Cement Head Type	Single		
Job Scheduled For	Mar/17/2013	Arrived on Location	Mar/17/2013
Leave Location	Mar/17/2013		

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	4265.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Float	Tail Pipe Depth	
Collar Depth	4219.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/16/2013	23:57:53					Started Acquisition
03/17/2013	00:42:49	-3	0.4	8.50	0.0	
03/17/2013	00:42:52					Start Job
03/17/2013	00:42:52	-3	0.4	8.50	0.0	
03/17/2013	00:43:07					Start Pumping Water
03/17/2013	00:43:07	-4	0.4	8.49	0.1	
03/17/2013	00:43:23	-4	0.3	8.50	0.2	
03/17/2013	00:45:33	-3	0.2	8.50	0.6	
03/17/2013	00:47:43	-5	0.2	8.51	1.0	
03/17/2013	00:49:42					Pressure Test Lines
03/17/2013	00:49:42	30	0.0	8.48	3.3	
03/17/2013	00:49:53	957	0.1	8.48	3.3	
03/17/2013	00:52:03	25	0.0	8.48	3.3	
03/17/2013	00:54:00					End Water
03/17/2013	00:54:00	407	6.3	8.49	10.1	
03/17/2013	00:54:05					Start CW 100
03/17/2013	00:54:05	406	6.3	8.49	10.6	
03/17/2013	00:54:13	405	6.3	8.49	11.4	
03/17/2013	00:56:23	434	6.3	8.48	25.1	
03/17/2013	00:57:14					End CW 100
03/17/2013	00:57:14	415	6.4	8.48	30.6	

Well	Field	Job Start	Customer	Job Number
Zimmerman 34-14-34-11H		Mar/17/2013	Source	947972

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/17/2013	00:58:13	371	6.4	8.49	36.9	
03/17/2013	00:58:33	377	6.5	9.24	39.1	
03/17/2013	01:00:43	461	6.4	13.31	52.8	
03/17/2013	01:02:53	389	6.4	13.22	66.6	
03/17/2013	01:03:40					End Lead Slurry
03/17/2013	01:03:40	411	6.4	13.55	71.6	
03/17/2013	01:03:46					Start Mixing Tail Slurry
03/17/2013	01:03:46	401	6.4	13.81	72.3	
03/17/2013	01:05:03	392	6.4	15.11	80.5	
03/17/2013	01:06:48					End Tail Slurry
03/17/2013	01:06:48	287	6.4	14.84	91.7	
03/17/2013	01:07:13	317	6.4	14.90	94.4	
03/17/2013	01:07:22					Shutdown
03/17/2013	01:07:22	11	5.9	14.90	95.3	
03/17/2013	01:07:27					Drop Top Plug
03/17/2013	01:07:27	-4	0.9	15.10	95.5	
03/17/2013	01:07:28					Start Displacement
03/17/2013	01:07:28	-9	0.3	15.10	95.5	
03/17/2013	01:09:23	-6	0.0	14.96	95.6	
03/17/2013	01:11:33	90	6.5	8.89	100.6	
03/17/2013	01:13:43	73	6.6	8.61	115.0	
03/17/2013	01:15:53	117	6.5	8.48	129.6	
03/17/2013	01:18:03	45	4.3	8.43	135.6	
03/17/2013	01:20:13	253	8.3	9.67	147.7	
03/17/2013	01:22:23	403	8.3	9.67	165.7	
03/17/2013	01:24:33	413	8.3	9.67	183.6	
03/17/2013	01:26:43	407	8.3	9.67	201.5	
03/17/2013	01:28:53	539	8.2	9.67	219.4	
03/17/2013	01:31:03	482	6.4	8.66	234.3	
03/17/2013	01:33:13	408	3.8	8.53	244.8	
03/17/2013	01:35:23	336	2.5	8.51	252.2	
03/17/2013	01:37:33	378	2.4	8.48	257.5	
03/17/2013	01:39:04					Bump Top Plug
03/17/2013	01:39:04	953	0.2	8.49	261.0	
03/17/2013	01:39:05					End Displacement
03/17/2013	01:39:05	953	0.1	8.49	261.0	
03/17/2013	01:39:43	960	0.0	8.49	261.0	
03/17/2013	01:41:53	967	0.2	8.49	261.1	
03/17/2013	01:42:05					Floats Held
03/17/2013	01:42:05	-5	0.1	8.54	261.2	
03/17/2013	01:42:20					End Job

Well	Field	Job Start	Customer	Job Number
Zimmerman 34-14-34-11H		Mar/17/2013	Source	947972

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
6.0			8.0	53.0	0.0	30.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2000	0		968				

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
		160.0 bbl		Washed Thru Perfs	To

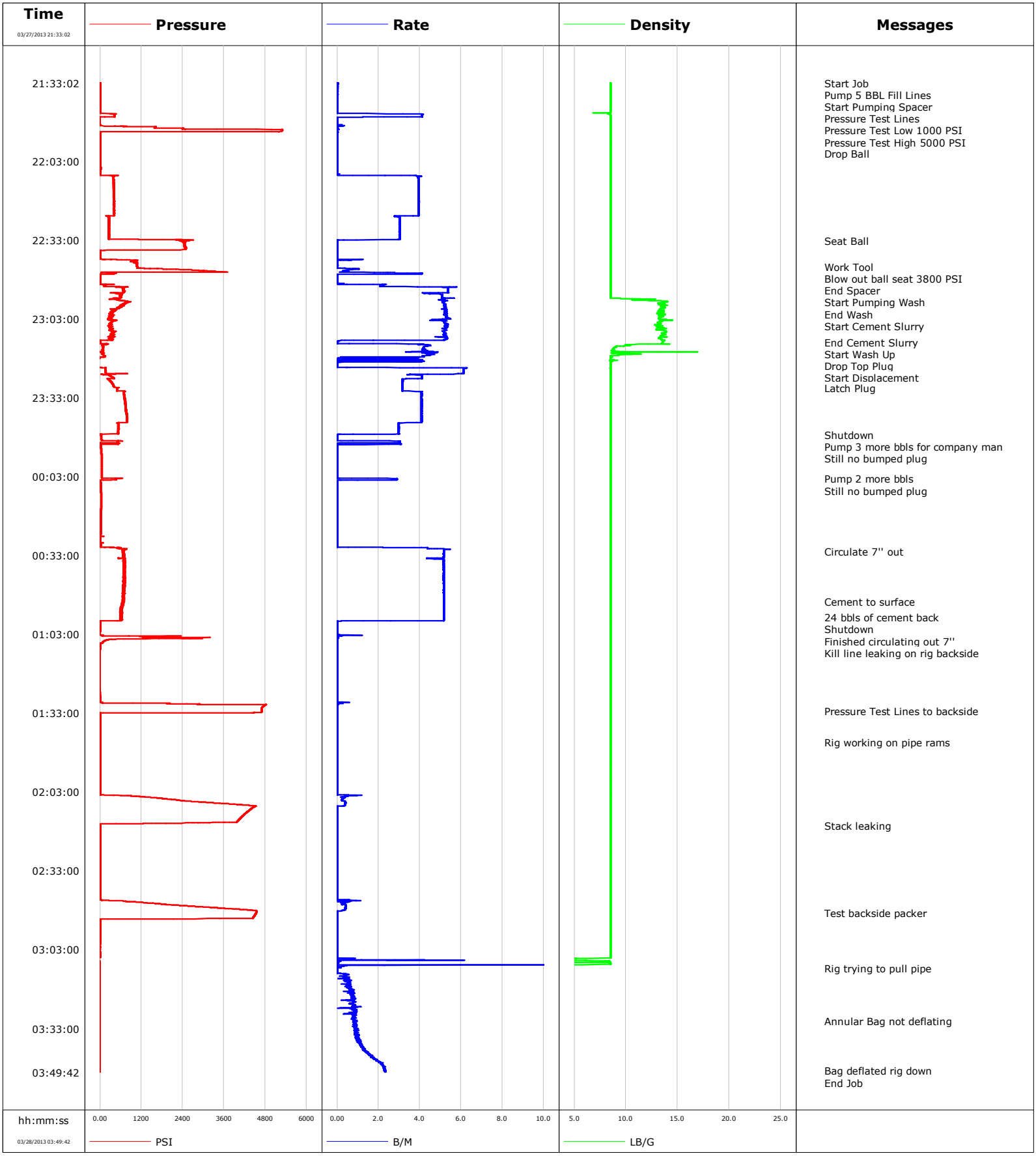
Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Roy Black	Charles Jacobs	-	-

Schlumberger

Cementing Job Report

CemCAT v1.3

Well	Zimmerman 34-14-34-11H	**Client**	Source
Field		**SIR No.**	CDL7-00143
Engineer	Dustin Green	**Job Type**	4 1/2" Liner String
Country	United States	**Job Date**	03-27-2013



Cementing Service Report

Customer	Job Number
Source	947973

Well	Location (legal)	Schlumberger Location	Job Start
Zimmerman 34-14-34-11H			Mar/27/2013

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
			6.1 in	8060.0 ft	3050.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Sumner	Kansas		126 degF	126 degF	

Well Master	API/UWI
0631451600	

Rig Name	Drilled For	Service Via
Pistol Rig #2	Oil & Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity

Service Line	Job Type
Cementing	Cement Liner

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
5000 psi		

Service Instructions

To provide services, equipment, personnel and materials to safely cement a 4-1/2" liner as per client request.
Pump 20 bbls, 20 bbls CW100, 275 sks single system slurry @13.5ppg, drop dart and displace as per client approval.

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
8060.0	4.500	11.6	N80	8RD
0.0	0.000	0.0		

Tubing/Drill Pipe

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
4007.0	4.000	14.0	xp39	N/A
0.0	0.000	0.0		

Perforations/Open Hole

Top,	Bottom,		No. of Shots	Total Interval
				Diameter

Treat Down	Displacement	Packer Type	Packer Depth
Drill Pipe	95.0 bbl	Dbl-String Retrievable	4007.0 ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
32.6 bbl	63.1 bbl		

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
☐	☒

Lift Pressure	
Pipe Rotated	☐
Pipe Reciprocated	☐

No. Centralizers	Top Plugs	Bottom Plugs
0	1	0

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Mar/27/2013	Mar/27/2013	Mar/27/2013

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	8060.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Float	Tail Pipe Depth	
Collar Depth	8050.6 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/27/2013	21:33:02	3	0.0	8.51	0.0	
03/27/2013	21:33:03					Start Job
03/27/2013	21:33:03	3	0.0	8.51	0.0	
03/27/2013	21:33:05					Pump 5 BBL Fill Lines
03/27/2013	21:33:05	3	0.0	8.51	0.0	
03/27/2013	21:33:18					Start Pumping Spacer
03/27/2013	21:33:18	3	0.0	8.51	0.0	
03/27/2013	21:36:02	3	0.0	8.52	0.1	
03/27/2013	21:39:02	3	0.0	8.51	0.1	
03/27/2013	21:42:02	3	0.0	8.52	0.2	
03/27/2013	21:42:28					Pressure Test Lines
03/27/2013	21:42:28	3	0.0	8.51	0.2	
03/27/2013	21:45:02	423	4.1	8.38	0.8	
03/27/2013	21:48:02	-1	0.0	8.49	5.5	
03/27/2013	21:50:15					Pressure Test Low 1000 PSI
03/27/2013	21:50:15	1599	0.0	8.49	5.6	
03/27/2013	21:51:02	5292	0.0	8.48	5.6	
03/27/2013	21:51:29					Pressure Test High 5000 PSI
03/27/2013	21:51:29	5278	0.0	8.49	5.6	
03/27/2013	21:54:02	12	0.0	8.49	5.6	
03/27/2013	21:54:08					Drop Ball

Well	Field	Job Start	Customer	Job Number
Zimmerman 34-14-34-11H		Mar/27/2013	Source	947973

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/27/2013	21:57:02	13	0.0	8.48	5.6	
03/27/2013	22:00:02	14	0.0	8.48	5.6	
03/27/2013	22:03:02	13	0.0	8.48	5.7	
03/27/2013	22:06:02	15	0.0	8.48	5.7	
03/27/2013	22:09:02	384	3.9	8.48	8.3	
03/27/2013	22:12:02	395	3.9	8.49	20.1	
03/27/2013	22:15:02	403	3.9	8.48	31.9	
03/27/2013	22:18:02	404	3.9	8.49	43.8	
03/27/2013	22:21:02	416	3.9	8.48	55.6	
03/27/2013	22:24:02	249	2.9	8.48	67.1	
03/27/2013	22:27:02	265	3.0	8.48	76.2	
03/27/2013	22:30:02	254	3.0	8.48	85.3	
03/27/2013	22:33:02	2526	0.0	8.48	94.0	
03/27/2013	22:33:10					Seat Ball
03/27/2013	22:33:10	2588	0.0	8.48	94.0	
03/27/2013	22:36:02	2503	0.0	8.48	94.0	
03/27/2013	22:39:02	12	0.0	8.48	94.0	
03/27/2013	22:42:02	1056	0.0	8.49	94.5	
03/27/2013	22:43:03					Work Tool
03/27/2013	22:43:03	1072	0.0	8.48	94.5	
03/27/2013	22:45:02	3510	0.3	8.49	95.2	
03/27/2013	22:45:15					Blow out ball seat 3800 PSI
03/27/2013	22:45:15	1560	0.2	8.49	95.3	
03/27/2013	22:46:03					End Spacer
03/27/2013	22:46:03	3	0.1	8.49	97.6	
03/27/2013	22:46:06					Start Pumping Wash
03/27/2013	22:46:06	2	0.0	8.49	97.6	
03/27/2013	22:48:02	3	0.0	8.49	97.6	
03/27/2013	22:51:02	704	5.3	8.50	101.2	
03/27/2013	22:54:02	615	5.1	8.49	116.7	
03/27/2013	22:55:06					End Wash
03/27/2013	22:55:06	509	5.7	8.98	122.1	
03/27/2013	22:55:08					Start Cement Slurry
03/27/2013	22:55:08	440	5.7	9.11	122.3	
03/27/2013	22:57:02	707	5.2	13.14	132.1	
03/27/2013	23:00:02	398	5.3	13.13	147.8	
03/27/2013	23:03:02	287	5.2	13.29	163.6	
03/27/2013	23:06:02	292	5.3	12.97	179.2	
03/27/2013	23:09:02	346	5.2	13.74	194.8	
03/27/2013	23:11:52					End Cement Slurry
03/27/2013	23:11:52	3	0.0	13.56	205.7	
03/27/2013	23:11:54					Start Wash Up
03/27/2013	23:11:54	2	0.0	13.55	205.7	
03/27/2013	23:12:02	2	0.0	13.54	205.7	
03/27/2013	23:15:02	92	4.2	8.69	216.5	
03/27/2013	23:18:02	-63	1.7	8.48	227.8	
03/27/2013	23:20:00					Drop Top Plug
03/27/2013	23:20:00	-202	0.0	8.49	230.7	
03/27/2013	23:20:03					Start Displacement
03/27/2013	23:20:03	-200	0.0	8.48	230.7	
03/27/2013	23:21:02	-62	0.0	8.49	230.7	
03/27/2013	23:24:02	41	4.4	8.49	246.0	
03/27/2013	23:27:02	334	3.2	8.48	257.0	
03/27/2013	23:29:21					Latch Plug

Well	Field	Job Start	Customer	Job Number
Zimmerman 34-14-34-11H		Mar/27/2013	Source	947973

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/27/2013	23:30:02	494	3.2	8.49	266.5	
03/27/2013	23:33:02	723	4.1	8.49	278.3	
03/27/2013	23:36:02	747	4.1	8.49	290.6	
03/27/2013	23:39:02	785	4.1	8.49	302.9	
03/27/2013	23:42:02	778	4.1	8.48	315.1	
03/27/2013	23:45:02	527	3.0	8.48	324.6	
03/27/2013	23:47:09					Shutdown
03/27/2013	23:47:09	21	0.0	8.49	330.1	
03/27/2013	23:48:02	36	0.0	8.49	330.1	
03/27/2013	23:49:34					Pump 3 more bbls for company man
03/27/2013	23:49:34	505	3.0	8.49	330.5	
03/27/2013	23:51:02	27	0.0	8.49	333.6	
03/27/2013	23:51:09					Still no bumped plug
03/27/2013	23:51:09	22	0.0	8.49	333.6	
03/27/2013	23:54:02	40	0.0	8.49	333.6	
03/27/2013	23:57:02	54	0.0	8.49	333.6	
03/28/2013	00:00:02	55	0.0	8.49	333.6	
03/28/2013	00:03:02	56	0.0	8.49	333.6	
03/28/2013	00:03:54					Pump 2 more bbls
03/28/2013	00:03:54	459	2.9	8.49	334.2	
03/28/2013	00:04:40					Still no bumped plug
03/28/2013	00:04:40	13	0.0	8.49	335.6	
03/28/2013	00:06:02	18	0.0	8.49	335.6	
03/28/2013	00:09:02	29	0.0	8.49	335.6	
03/28/2013	00:12:02	31	0.0	8.49	335.6	
03/28/2013	00:15:02	29	0.0	8.49	335.6	
03/28/2013	00:18:02	27	0.0	8.49	335.6	
03/28/2013	00:21:02	23	0.0	8.49	335.7	
03/28/2013	00:24:02	21	0.0	8.49	335.7	
03/28/2013	00:27:02	1	0.0	8.49	335.7	
03/28/2013	00:30:02	560	2.4	8.49	335.9	
03/28/2013	00:31:32					Circulate 7'' out
03/28/2013	00:31:32	708	5.2	8.49	343.2	
03/28/2013	00:33:02	707	5.1	8.49	350.9	
03/28/2013	00:36:02	726	5.1	8.48	366.1	
03/28/2013	00:39:02	737	5.1	8.48	381.6	
03/28/2013	00:42:02	727	5.1	8.48	397.0	
03/28/2013	00:45:02	726	5.1	8.48	412.4	
03/28/2013	00:48:02	713	5.2	8.48	427.9	
03/28/2013	00:50:33					Cement to surface
03/28/2013	00:50:33	652	5.1	8.49	440.8	
03/28/2013	00:51:02	678	5.1	8.48	443.3	
03/28/2013	00:54:02	648	5.2	8.48	458.8	
03/28/2013	00:56:35					24 bbls of cement back
03/28/2013	00:56:35	641	5.1	8.48	471.9	
03/28/2013	00:57:02	632	5.1	8.48	474.2	
03/28/2013	00:57:59					Shutdown
03/28/2013	00:57:59	7	0.2	8.48	478.7	
03/28/2013	00:58:05					Finished circulating out 7''
03/28/2013	00:58:05	7	0.0	8.48	478.7	
03/28/2013	01:00:02	6	0.0	8.48	478.8	
03/28/2013	01:03:02	-1	0.0	8.48	478.8	
03/28/2013	01:06:02	82	0.0	8.48	478.9	
03/28/2013	01:06:18					Kill line leaking on rig backside

Well	Field	Job Start	Customer	Job Number
Zimmerman 34-14-34-11H		Mar/27/2013	Source	947973

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/28/2013	01:09:02	-2	0.0	8.48	478.9	
03/28/2013	01:12:02	-4	0.0	8.49	479.0	
03/28/2013	01:15:02	-3	0.0	8.49	479.0	
03/28/2013	01:18:02	-3	0.0	8.49	479.0	
03/28/2013	01:21:02	-1	0.0	8.49	479.0	
03/28/2013	01:24:02	-1	0.0	8.49	479.1	
03/28/2013	01:27:02	0	0.0	8.49	479.1	
03/28/2013	01:30:02	4789	0.0	8.48	479.2	
03/28/2013	01:32:17					Pressure Test Lines to backside
03/28/2013	01:32:17	4688	0.0	8.48	479.2	
03/28/2013	01:33:02	5	0.0	8.48	479.2	
03/28/2013	01:36:02	2	0.0	8.48	479.2	
03/28/2013	01:39:02	2	0.0	8.49	479.2	
03/28/2013	01:42:02	3	0.0	8.49	479.3	
03/28/2013	01:44:11					Rig working on pipe rams
03/28/2013	01:44:11	6	0.0	8.49	479.3	
03/28/2013	01:45:02	6	0.0	8.49	479.3	
03/28/2013	01:48:02	8	0.0	8.49	479.3	
03/28/2013	01:51:02	8	0.0	8.49	479.3	
03/28/2013	01:54:02	9	0.0	8.48	479.4	
03/28/2013	01:57:02	9	0.0	8.48	479.4	
03/28/2013	02:00:02	10	0.0	8.48	479.4	
03/28/2013	02:03:02	10	0.0	8.48	479.4	
03/28/2013	02:06:02	2165	0.2	8.48	480.2	
03/28/2013	02:09:02	4436	0.0	8.48	481.1	
03/28/2013	02:12:02	4155	0.0	8.48	481.1	
03/28/2013	02:15:02	1916	0.0	8.48	481.1	
03/28/2013	02:15:55					Stack leaking
03/28/2013	02:15:55	5	0.0	8.48	481.1	
03/28/2013	02:18:02	5	0.0	8.48	481.1	
03/28/2013	02:21:02	3	0.0	8.48	481.1	
03/28/2013	02:24:02	1	0.0	8.48	481.2	
03/28/2013	02:27:02	1	0.0	8.48	481.2	
03/28/2013	02:30:02	0	0.0	8.48	481.2	
03/28/2013	02:33:02	0	0.0	8.48	481.2	
03/28/2013	02:36:02	0	0.0	8.48	481.2	
03/28/2013	02:39:02	-0	0.0	8.48	481.3	
03/28/2013	02:42:02	0	0.0	8.48	481.3	
03/28/2013	02:45:02	1133	0.5	8.48	481.7	
03/28/2013	02:48:02	4352	0.3	8.48	482.8	
03/28/2013	02:49:16					Test backside packer
03/28/2013	02:49:16	4526	0.0	8.48	482.9	
03/28/2013	02:51:02	4439	0.0	8.48	482.9	
03/28/2013	02:54:02	4	0.0	8.48	483.0	
03/28/2013	02:57:02	3	0.0	8.48	483.0	
03/28/2013	03:00:02	0	0.0	8.48	483.0	
03/28/2013	03:03:02	-1	0.0	8.48	483.0	
03/28/2013	03:06:02	0	0.0	8.48	483.0	
03/28/2013	03:09:02	-10	0.6	0.18	485.6	
03/28/2013	03:10:16					Rig trying to pull pipe
03/28/2013	03:10:16	-3	0.0	0.08	485.8	
03/28/2013	03:12:02	-2	0.0	0.08	485.8	
03/28/2013	03:15:02	-5	0.5	0.08	487.0	
03/28/2013	03:18:02	-5	0.7	0.08	488.7	

Well	Field	Job Start	Customer	Job Number
Zimmerman 34-14-34-11H		Mar/27/2013	Source	947973

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/28/2013	03:24:02	-5	0.8	0.08	493.0	
03/28/2013	03:27:02	-5	0.6	0.07	495.4	
03/28/2013	03:30:02	-6	0.9	0.07	497.7	
03/28/2013	03:30:16					Annular Bag not deflating
03/28/2013	03:30:16	-6	0.8	0.07	498.0	
03/28/2013	03:33:02	-5	0.9	0.07	500.4	
03/28/2013	03:36:02	-6	0.9	0.07	503.2	
03/28/2013	03:39:02	-6	1.1	0.08	506.2	
03/28/2013	03:42:02	-7	1.4	0.10	510.0	
03/28/2013	03:45:02	-8	1.9	0.13	514.9	
03/28/2013	03:48:02	-9	2.3	0.16	521.3	
03/28/2013	03:49:17					Bag deflated rig down
03/28/2013	03:49:17	-9	2.3	0.17	524.2	
03/28/2013	03:49:21					End Job

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
5.0			6.0	80.0		20.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
5000	528	736					

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
		95.0 bbl		Washed Thru Perfs	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Roy Black	Dusitn Green	-	-

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 316-337-6211
http://kcc.ks.gov/

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

June 10, 2013

Elizabeth Habermehl
Source Energy MidCon LLC
1805 SHEA CENTER DR., STE 100
HIGHLANDS RANCH, CO 80129

Re: ACO1
API 15-191-22675-00-00
T&C Zimmerman 34-14 -34-11H
SW/4 Sec.34-31S-01E
Sumner County, Kansas

Dear Production Department:

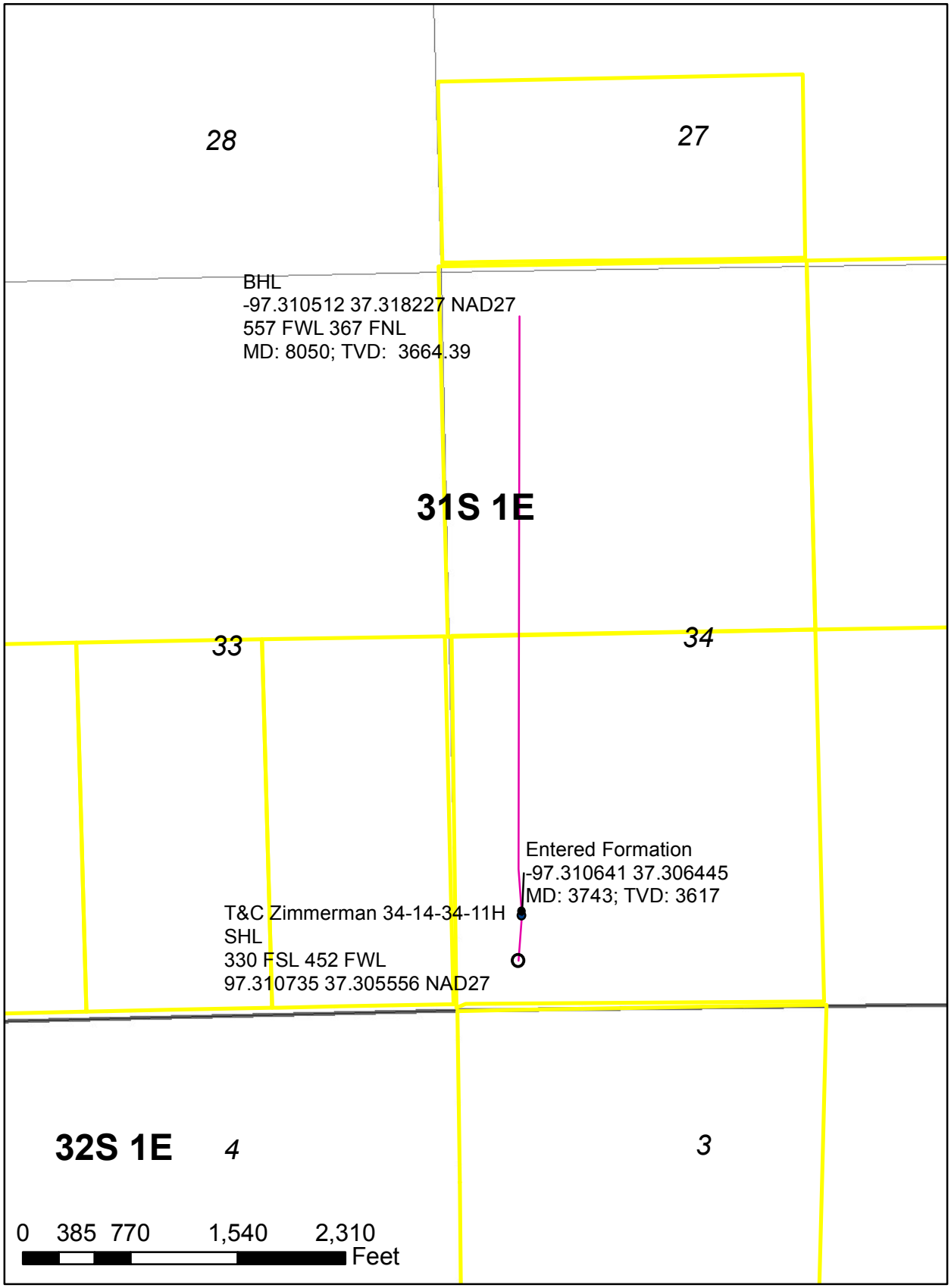
We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Elizabeth Habermehl

Source Energy MidCon, LLC
Horiz Completion (NAD27)

T&C Zimmerman 34-14-34-11H



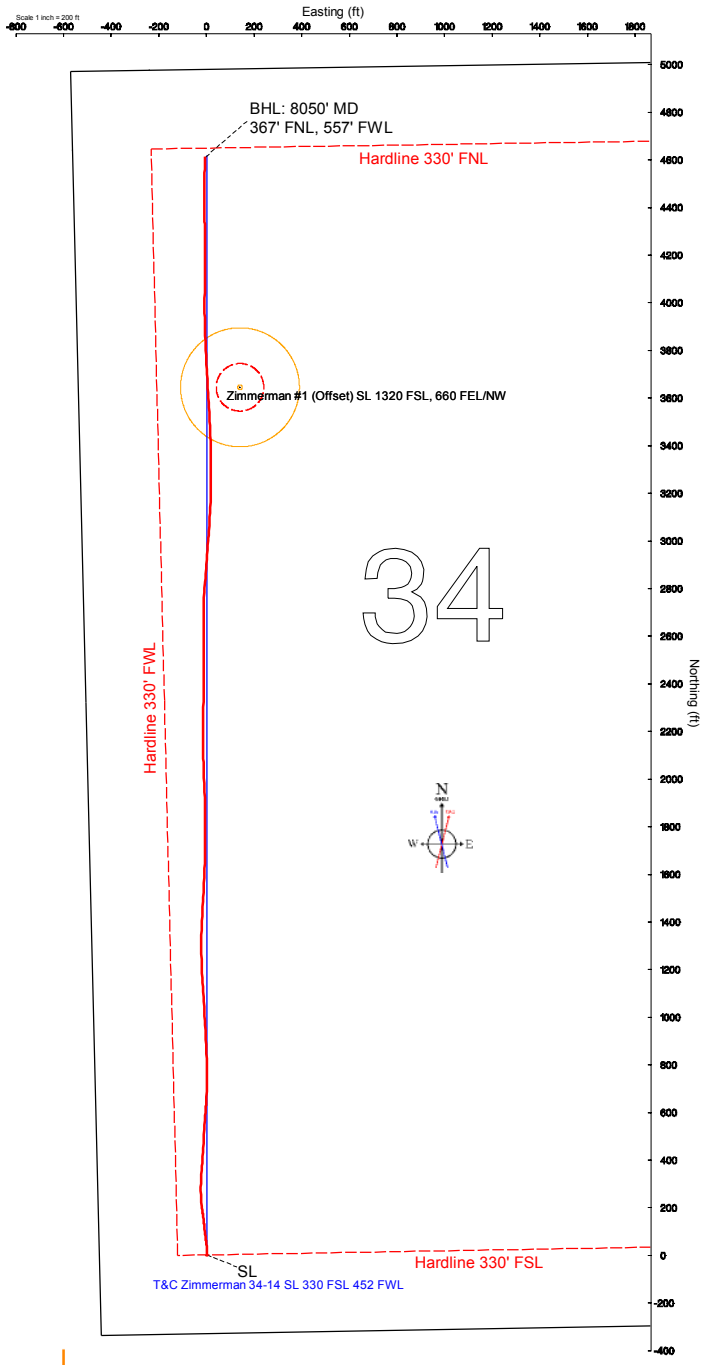
Source Energy

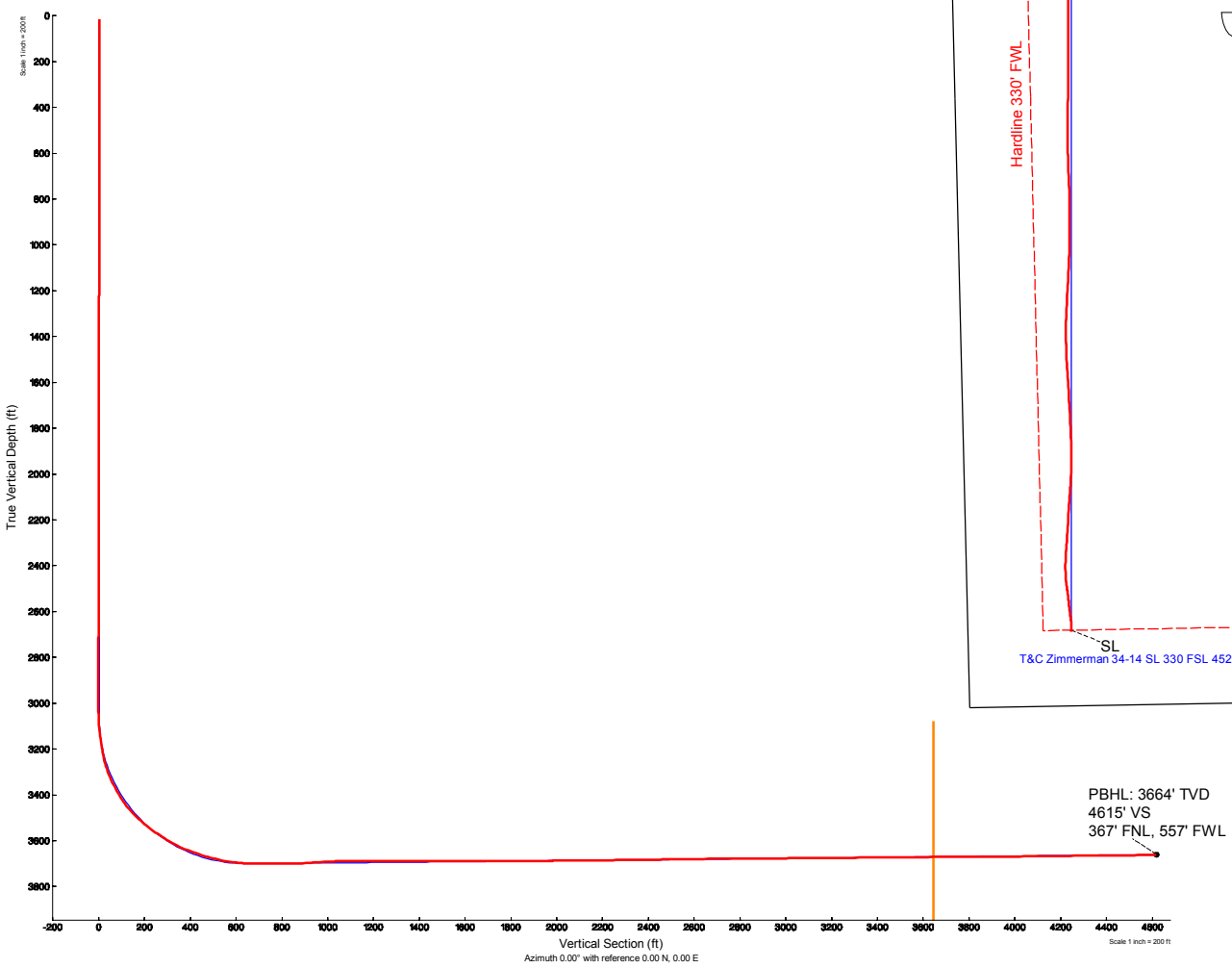
T&C Zimmerman 34-14 (FINAL)
T&C Zimmerman 34-14 SL 330 FSL 452 FWL
Sumner County, KS (Source Energy) NAD27 /Grid

Plot reference wellpath is Plan 2	
True vertical depths are referenced to Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB)	Grid System: NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet
Measured depths are referenced to Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB)	North Reference: Grid north
Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB) to Mean Sea Level: 1326 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: T&C Zimmerman 34-14 SL 330 FSL 452 FWL): -1309 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: fermikj on 3/4/2013

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
T&C Zimmerman 34-14 Sec. 34-31S-1E			2345906.000	234836.000	37°18'20.002"N	97°18'38.644"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
T&C Zimmerman 34-14 SL 330 FSL 452 FWL	0.00	0.00	2345906.000	234836.000	37°18'20.002"N	97°18'38.644"W
Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB) to Mud line (At Slot: T&C Zimmerman 34-14 SL 330 FSL 452 FWL)					17ft	
Mean Sea Level to Mud line (At Slot: T&C Zimmerman 34-14 SL 330 FSL 452 FWL)					-1309ft	
Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB) to Mean Sea Level					1326ft	





BAKER HUGHES

Actual Wellpath Report

Source Energy T&C Zimmerman 34-14_Final Surveys.

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Source Energy**	Slot	**T&C Zimmerman 34-14 SL 330 FSL 452 FWL**
Area	**Kansas**	Well	**T&C Zimmerman 34-14 (Pistol Drilling #2)**
Field	**Sumner County, KS (Source Energy) NAD27 /Grid**	Wellbore	**T&C Zimmerman 34-14 Actual**
Facility	**T&C Zimmerman 34-14 Sec. 34-31S-1E**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet**		
North Reference	**Grid**	Software System	**WellArchitect 3.0.0**
Convergence at slot	**0.73° East**	User	**Bouglac**
Scale	**0.999993**	Report Generated	**02/Apr/2013** at **12:52**
Wellbore last revised	**03-01-2013**	Database/Source file	**OKC**

WELLPATH LOCATION						
	Local coordinates		**Grid coordinates**		**Geographic coordinates**	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	2345906.00	234836.00	37°18'20.002"N	97°18'38.644"W
Facility Reference Pt			**2345906.00**	**234836.00**	37°18'20.002"N	97°18'38.644"W
Field Reference Pt			2258736.39	204024.03	**37°13'24.980"N**	**97°36'41.120"W**

WELLPATH DATUM		
Calculation method	**Minimum curvature**	Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB) to Fa
Horizontal Reference Pt	**Facility Center**	Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB) to M
Vertical Reference Pt	**Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB)**	Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB) to M
MD Reference Pt	**Rig on Zimmermann 34-14-34-11H 330 FSL 452 FWL (RKB)**	Section Origin
Field Vertical Reference	**Mean Sea Level**	Section Azimuth

Actual Wellpath Report

Source Energy T&C Zimmerman 34-14_Final Surveys.

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Source Energy**	Slot	**T&C Zimmerman 34-14 SL 330 FSL 452 FWL**
Area	**Kansas**	Well	**T&C Zimmerman 34-14 (Pistol Drilling #2)**
Field	**Sumner County, KS (Source Energy) NAD27 /Grid**	Wellbore	**T&C Zimmerman 34-14 Actual**
Facility	**T&C Zimmerman 34-14 Sec. 34-31S-1E**		

WELLPATH DATA (110 stations) = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
0.00	0.000	250.580	0.00	0.00	0.00	0.00	2345906.00	234836.00	0.00	
17.00	0.000	250.580	17.00	0.00	0.00	0.00	2345906.00	234836.00	0.00	
342.00	0.150	250.580	342.00	-0.14	-0.14	-0.40	2345905.60	234835.86	0.05	
404.00	0.030	294.600	404.00	-0.16	-0.16	-0.49	2345905.51	234835.84	0.21	
495.00	0.150	74.630	495.00	-0.12	-0.12	-0.40	2345905.60	234835.88	0.19	
587.00	0.030	260.950	587.00	-0.09	-0.09	-0.31	2345905.69	234835.91	0.20	
678.00	0.110	19.740	678.00	-0.01	-0.01	-0.30	2345905.70	234835.99	0.14	
769.00	0.140	277.390	769.00	0.08	0.08	-0.38	2345905.62	234836.08	0.22	
860.00	0.060	177.770	860.00	0.05	0.05	-0.49	2345905.51	234836.05	0.18	
951.00	0.030	144.810	951.00	-0.02	-0.02	-0.47	2345905.53	234835.98	0.04	
1042.00	0.110	134.380	1042.00	-0.10	-0.10	-0.40	2345905.60	234835.90	0.09	
1133.00	0.170	180.430	1133.00	-0.29	-0.29	-0.34	2345905.66	234835.71	0.13	
1224.00	0.280	147.370	1224.00	-0.62	-0.62	-0.22	2345905.78	234835.38	0.18	
1315.00	0.030	120.480	1315.00	-0.82	-0.82	-0.08	2345905.92	234835.18	0.28	
1407.00	0.090	182.980	1407.00	-0.90	-0.90	-0.06	2345905.94	234835.10	0.09	
1498.00	0.170	56.910	1498.00	-0.90	-0.90	0.05	2345906.05	234835.10	0.26	
1589.00	0.070	184.550	1589.00	-0.88	-0.88	0.16	2345906.16	234835.12	0.24	
1680.00	0.090	162.780	1680.00	-1.00	-1.00	0.17	2345906.17	234835.00	0.04	
1773.00	0.140	102.280	1773.00	-1.10	-1.10	0.31	2345906.31	234834.90	0.13	
1865.00	0.070	132.870	1865.00	-1.16	-1.16	0.46	2345906.46	234834.84	0.09	
1957.00	0.140	62.890	1957.00	-1.15	-1.15	0.60	2345906.60	234834.85	0.14	
2049.00	0.260	176.220	2049.00	-1.30	-1.30	0.71	2345906.71	234834.70	0.37	
2142.00	0.120	295.240	2142.00	-1.47	-1.47	0.64	2345906.64	234834.53	0.36	
2235.00	0.140	260.160	2235.00	-1.45	-1.45	0.44	2345906.44	234834.55	0.09	
2330.00	0.110	333.740	2330.00	-1.39	-1.39	0.28	2345906.28	234834.61	0.16	
2424.00	0.220	185.140	2424.00	-1.49	-1.49	0.23	2345906.23	234834.51	0.34	
2517.00	0.180	166.470	2517.00	-1.81	-1.81	0.25	2345906.25	234834.19	0.08	
2611.00	0.620	208.050	2610.99	-2.40	-2.40	0.04	2345906.04	234833.60	0.53	
2705.00	0.490	198.980	2704.99	-3.23	-3.23	-0.33	2345905.67	234832.77	0.17	
2800.00	0.220	158.150	2799.99	-3.78	-3.78	-0.39	2345905.61	234832.22	0.37	
2895.00	0.140	54.820	2894.99	-3.88	-3.88	-0.23	2345905.77	234832.12	0.30	
2989.00	0.150	125.850	2988.99	-3.89	-3.89	-0.04	2345905.96	234832.11	0.18	
3021.00	0.470	359.200	3020.99	-3.78	-3.78	0.00	2345906.00	234832.22	1.79	
3052.00	2.140	10.380	3051.98	-3.09	-3.09	0.10	2345906.10	234832.91	5.42	
3083.00	3.640	8.430	3082.94	-1.54	-1.54	0.35	2345906.35	234834.46	4.85	
3115.00	4.830	5.530	3114.85	0.80	0.80	0.63	2345906.63	234836.80	3.78	
3146.00	6.260	3.000	3145.70	3.79	3.79	0.84	2345906.84	234839.79	4.68	
3177.00	8.130	1.830	3176.46	7.67	7.67	1.00	2345907.00	234843.67	6.05	
3209.00	10.760	359.270	3208.02	12.92	12.92	1.03	2345907.03	234848.92	8.32	
3240.00	12.920	357.550	3238.36	19.27	19.27	0.85	2345906.85	234855.27	7.06	
3271.00	16.290	356.020	3268.35	27.08	27.08	0.40	2345906.40	234863.08	10.94	
3303.00	20.220	354.180	3298.74	37.06	37.06	-0.48	2345905.52	234873.06	12.41	
3335.00	24.030	352.720	3328.38	49.03	49.03	-1.86	2345904.14	234885.03	12.03	
3366.00	27.010	351.990	3356.35	62.26	62.26	-3.64	2345902.36	234898.26	9.67	
3398.00	28.550	353.950	3384.66	77.06	77.06	-5.46	2345900.54	234913.06	5.59	

Actual Wellpath Report

Source Energy T&C Zimmerman 34-14_Final Surveys.

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Source Energy**	Slot	**T&C Zimmerman 34-14 SL 330 FSL 452 FWL**
Area	**Kansas**	Well	**T&C Zimmerman 34-14 (Pistol Drilling #2)**
Field	**Sumner County, KS (Source Energy) NAD27 /Grid**	Wellbore	**T&C Zimmerman 34-14 Actual**
Facility	**T&C Zimmerman 34-14 Sec. 34-31S-1E**		

WELLPATH DATA (110 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
3429.00	31.950	353.960	3411.43	92.59	92.59	-7.11	2345898.89	234928.59	10.97	
3461.00	36.320	354.040	3437.92	110.44	110.44	-8.98	2345897.02	234946.44	13.66	
3492.00	40.360	353.190	3462.22	129.55	129.55	-11.13	2345894.87	234965.55	13.14	
3524.00	44.020	352.280	3485.93	150.86	150.86	-13.85	2345892.15	234986.86	11.60	
3555.00	47.280	352.700	3507.60	172.84	172.84	-16.74	2345889.26	235008.84	10.56	
3587.00	50.340	352.930	3528.67	196.73	196.73	-19.75	2345886.25	235032.73	9.58	
3619.00	52.780	354.810	3548.56	221.65	221.65	-22.42	2345883.58	235057.64	8.91	
3650.00	54.850	356.850	3566.87	246.60	246.60	-24.24	2345881.76	235082.59	8.53	
3681.00	56.960	359.430	3584.24	272.25	272.25	-25.06	2345880.94	235108.25	9.69	
3713.00	59.030	2.150	3601.21	299.38	299.38	-24.68	2345881.32	235135.38	9.68	
3745.00	61.960	3.790	3616.96	327.19	327.19	-23.23	2345882.77	235163.18	10.18	
3777.00	65.530	4.090	3631.12	355.81	355.81	-21.26	2345884.74	235191.81	11.19	
3808.00	68.610	3.710	3643.19	384.29	384.29	-19.32	2345886.68	235220.29	10.00	
3840.00	70.760	3.410	3654.30	414.24	414.24	-17.46	2345888.54	235250.24	6.78	
3871.00	72.650	3.710	3664.03	443.62	443.62	-15.63	2345890.37	235279.61	6.17	
3902.00	74.640	3.840	3672.76	473.30	473.30	-13.67	2345892.33	235309.29	6.43	
3934.00	76.420	3.520	3680.76	504.22	504.22	-11.68	2345894.32	235340.21	5.65	
3965.00	78.280	3.900	3687.55	534.40	534.40	-9.72	2345896.28	235370.39	6.12	
3997.00	80.790	4.070	3693.36	565.79	565.79	-7.54	2345898.46	235401.78	7.86	
4029.00	83.550	3.930	3697.72	597.41	597.41	-5.33	2345900.67	235433.40	8.64	
4061.00	86.120	3.740	3700.60	629.21	629.21	-3.20	2345902.80	235465.20	8.05	
4093.00	88.830	3.290	3702.01	661.11	661.11	-1.24	2345904.76	235497.11	8.58	
4124.00	90.370	2.570	3702.22	692.07	692.07	0.35	2345906.35	235528.06	5.48	
4235.00	89.780	357.470	3702.08	803.03	803.03	0.39	2345906.39	235639.02	4.63	
4370.00	93.980	357.430	3697.65	937.80	937.80	-5.61	2345900.39	235773.79	3.11	
4465.00	92.640	356.940	3692.17	1032.52	1032.52	-10.27	2345895.73	235868.51	1.50	
4560.00	89.040	355.920	3690.77	1127.31	1127.31	-16.19	2345889.81	235963.30	3.94	
4654.00	90.250	357.840	3691.36	1221.16	1221.16	-21.30	2345884.70	236057.15	2.41	
4749.00	90.000	0.570	3691.15	1316.14	1316.14	-22.62	2345883.38	236152.13	2.89	
4862.00	90.000	3.050	3691.15	1429.08	1429.08	-19.05	2345886.95	236265.06	2.19	
4955.00	89.110	3.340	3691.87	1521.93	1521.93	-13.87	2345892.13	236357.92	1.01	
5047.00	90.280	2.410	3692.36	1613.81	1613.81	-9.25	2345896.75	236449.79	1.62	
5139.00	90.310	0.470	3691.89	1705.78	1705.78	-6.94	2345899.06	236541.76	2.11	
5230.00	90.340	359.810	3691.37	1796.77	1796.77	-6.72	2345899.28	236632.76	0.73	
5322.00	90.370	358.910	3690.80	1888.76	1888.76	-7.75	2345898.25	236724.75	0.98	
5413.00	90.860	357.520	3689.82	1979.71	1979.71	-10.58	2345895.42	236815.69	1.62	
5505.00	90.180	358.320	3688.99	2071.65	2071.65	-13.92	2345892.08	236907.63	1.14	
5600.00	90.740	359.480	3688.23	2166.62	2166.62	-15.74	2345890.26	237002.60	1.36	
5695.00	90.740	1.200	3687.00	2261.61	2261.61	-15.18	2345890.82	237097.59	1.81	
5789.00	90.740	0.760	3685.79	2355.59	2355.59	-13.57	2345892.43	237191.57	0.47	
5884.00	90.860	0.660	3684.46	2450.57	2450.57	-12.40	2345893.60	237286.55	0.16	
5977.00	90.830	359.500	3683.09	2543.56	2543.56	-12.27	2345893.73	237379.54	1.25	
6072.00	90.650	359.040	3681.86	2638.55	2638.55	-13.48	2345892.52	237474.52	0.52	
6166.00	90.560	1.580	3680.87	2732.53	2732.53	-12.97	2345893.03	237568.51	2.70	
6261.00	90.310	5.250	3680.15	2827.34	2827.34	-7.31	2345898.69	237663.32	3.87	

Actual Wellpath Report

Source Energy T&C Zimmerman 34-14_Final Surveys.

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Source Energy**	Slot	**T&C Zimmerman 34-14 SL 330 FSL 452 FWL**
Area	**Kansas**	Well	**T&C Zimmerman 34-14 (Pistol Drilling #2)**
Field	**Sumner County, KS (Source Energy) NAD27 /Grid**	Wellbore	**T&C Zimmerman 34-14 Actual**
Facility	**T&C Zimmerman 34-14 Sec. 34-31S-1E**		

WELLPATH DATA (110 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
6354.00	90.340	3.850	3679.62	2920.05	2920.05	0.07	2345906.07	237756.02	1.51	
6448.00	90.460	4.480	3678.96	3013.80	3013.80	6.89	2345912.89	237849.77	0.68	
6553.00	90.400	2.910	3678.17	3118.57	3118.57	13.66	2345919.66	237954.54	1.50	
6644.00	90.430	1.360	3677.52	3209.50	3209.50	17.05	2345923.05	238045.47	1.70	
6736.00	90.830	359.750	3676.50	3301.49	3301.49	17.94	2345923.94	238137.46	1.80	
6828.00	90.310	358.650	3675.59	3393.47	3393.47	16.66	2345922.66	238229.44	1.32	
6922.00	90.680	357.190	3674.78	3487.41	3487.41	13.25	2345919.25	238323.37	1.60	
7016.00	90.340	356.410	3673.94	3581.25	3581.25	8.00	2345914.00	238417.22	0.91	
7109.00	90.430	357.100	3673.31	3674.10	3674.10	2.73	2345908.73	238510.07	0.75	
7205.00	90.400	357.200	3672.62	3769.98	3769.98	-2.04	2345903.96	238605.95	0.11	
7298.00	90.220	357.470	3672.12	3862.88	3862.88	-6.36	2345899.64	238698.84	0.35	
7392.00	90.430	359.530	3671.58	3956.84	3956.84	-8.82	2345897.18	238792.80	2.20	
7487.00	90.590	1.060	3670.74	4051.83	4051.83	-8.33	2345897.67	238887.79	1.62	
7581.00	90.770	0.470	3669.62	4145.82	4145.82	-7.08	2345898.92	238981.78	0.66	
7675.00	90.710	359.460	3668.41	4239.81	4239.81	-7.14	2345898.86	239075.77	1.08	
7769.00	90.490	358.700	3667.42	4333.79	4333.79	-8.65	2345897.35	239169.75	0.84	
7862.00	90.280	359.080	3666.80	4426.77	4426.77	-10.45	2345895.55	239262.73	0.47	
7954.00	90.830	1.410	3665.91	4518.76	4518.76	-10.05	2345895.95	239354.72	2.60	
7983.00	90.920	2.490	3665.46	4547.74	4547.74	-9.07	2345896.93	239383.70	3.74	
8050.00	90.920	2.490	3664.39	4614.67	4614.67	-6.16	2345899.84	239450.62	0.00	**BHL at 557' FWL, 367' FNL**

WELLPATH COMPOSITION - Ref Wellbore: T&C Zimmerman 34-14 Actual Ref Wellpath: AWP- final

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7983.00	NaviTrak (Standard)	AT Curve Surveys	T&C Zimmerman 34-14 Actual
7983.00	8050.00	Blind Drilling (std)	Projection to bit	T&C Zimmerman 34-14 Actual