



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1189644
OIL & GAS CONSERVATION DIVISION

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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 #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

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: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1189644

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> 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 <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lit Trust 3508 6-14H
Doc ID	1189644

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5612-5615	Kiel Slickwater Frac	5612-5675
5	5672-5675	Kiel Slickwater Frac	5747-5950
5	5828-5831		
5	5905-5908		
5	5947-5950		
5	5989-5992	Kiel Slickwater Frac	5989-6120
5	6061-6064		
5	6117-6120		
5	6229-6232	Kiel Slickwater Frac	6229-6356
5	6293-6296		
5	6353-6356		
5	6447-6450	Kiel Slickwater Frac	6447-6608
5	6532-6535		
5	6605-6608		
5	6693-6696	Kiel Slickwater Frac	6693-6835
5	6772-6775		
5	6832-6835		
5	6922-6925	Kiel Slickwater Frac	6922-7080
5	7019-7022		
5	7077-7080		
5	7145-7148	Kiel Slickwater Frac	7145-7304
5	7209-7212		
5	7301-7304		
5	7377-7380	Kiel Slickwater Frac	7377-7508

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lit Trust 3508 6-14H
Doc ID	1189644

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	7429-7432		
5	7505-7508		
5	7573-7576	Kiel Slickwater Frac	7573-7700
5	7640-7643		
5	7697-7700		

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/27/2013
Job End Date:	12/31/2013
State:	Kansas
County:	Harper
API Number:	15-077-21970-00-00
Operator Name:	SandRidge Energy
Well Name and Number:	Lit Trust 3508 6-14H
Longitude:	-98.15057751
Latitude:	37.00662901
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,869
Total Base Water Volume (gal):	2,345,280
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Company 1	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	94.74034	None
Sand (Proppant)	Company 2	Proppant					
			Silica Substrate	NA	100.00000	4.38168	None
Hydrochloric Acid (15%)	Company 2	Acidizing					
			Hydrochloric Acid	7647-01-0	15.00000	0.11116	None
			NONYL PHENOL, 4 MOL	104-40-5	10.00000	0.00456	None
			Methyl Alcohol	67-56-1	80.00000	0.00089	None
			thiourea-formaldehyde copolymer	68527-49-1	15.00000	0.00017	None
Chemflush	Archer	Enviro-Friendly Chemical Flush					
			Acrylamide modified copolymer	NA	60.00000	0.00667	None
			Aliphatic hydrocarbon	64742-47-8	30.00000	0.00334	None
			Hydrotreated Petroleum Distillate	64742-47-8	99.00000	0.00102	None
			Ammonium chloride	12125-02-9	5.00000	0.00056	None
			Oxyalkylated Alcohol	NA	5.00000	0.00056	None
			Alcohol Ethoxylate Surfactants	NA	10.00000	0.00010	None
AIC	Archer	Liquid Acid Iron Control					

		Acetic Acid	64-19-7	50.00000	0.00200	None
		Citric Acid	77-92-9	30.00000	0.00120	None
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.						
		Other Chemicals				
		Water	7732-18-5		0.04443	
		WATER	7732-18-5		0.02736	
		Aliphatic Hydrocarbon	64742-47-8		0.02221	
		Anionic Polymer	N/A		0.02221	
		TRADE SECRET	N/A		0.01824	
		Water	7732-18-5		0.01001	
		METHANOL	67-56-1		0.00456	
		ISOPROPANOL	67-63-0		0.00456	
		Polyol Ester	N/A		0.00370	
		Oxyalkylated Alcohol	68002-97-1		0.00370	
		Water	7732-18-5		0.00334	
		Acrylic Polymer	28205-96-1		0.00167	
		Sodium Salt of Phosphate Ester	68131-72-6		0.00167	
		Water	7732-18-5		0.00140	
		Polyglycol Ester	N/A		0.00074	
		Polyol Ester	N/A		0.00056	
		Alkanolamide	N/A		0.00056	
		Alcohol Ethoxylate Surfactants	N/A		0.00017	
		Ammonium salt	7783-18-8		0.00011	
		Oxyalkylated fatty Acid Derivative	N/A		0.00011	
		Alkanolamine	111-42-2		0.00011	
		Surfactant	N/A		0.00011	
		n-olefins	N/A		0.00009	
		Tetrasodium Ethylenediaminetetraacetate	64-02-8		0.00007	
		Propargyl Alcohol	107-19-7		0.00007	
		Buffer	N/A			
		Surfactant	N/A			

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)



INVOICE

DATE	INVOICE #
10/22/2013	4288

BILL TO
SANDRIDGE ENERGY, INC. ATTN: PURCHASING MANAGER 123 ROBERT S. KERR AVENUE OKLAHOMA CITY, OK 73102

REMIT TO
EDGE SERVICES, INC. PO BOX 609 WOODWARD, OK 73802

COUNTY	STARTING D...	WORK ORDER	RIG NUMBER	LEASE NAME	Terms
HARPER, KS	10/21/2013	3324	LARIAT 20	LIT TRUST 3508 614H	Due on rec...

Description

DRILLED 90' OF 30" CONDUCTOR HOLE
 DRILLED 6' OF 76" HOLE
 FURNISHED AND SET 6' X 6' TINHORN CELLAR
 FURNISHED 90' OF 20" CONDUCTOR PIPE
 FURNISHED 1 LOAD(S) MUD
 FURNISHED WELDER AND MATERIALS
 FURNISHED 11 YARDS OF GRADE A CEMENT
 FURNISHED GROUT PUMP
 DRILL MOUSE HOLE
 FURNISHED 80' OF 14" CONDUCTOR PIPE FOR MOUSE HOLE
 FURNISH 8' X 8' 1/2" PLATE FOR WELL COVER
 FURNISH 4 - 10' X 10' PANELS FOR SAFETY BARRIER

TOTAL BID \$ 19,000.00

AFE Number: DC13288
 Well Name: LIT TRUST 6-14H 3508
 Code: 830-090
 Amount: 19170.85
 Co. Man: John Fortune
 Co. Man Sig: [Signature]
 Notes: _____

Sales Tax (6.15%)	\$170.85
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TOTAL	\$19,170.85
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ALLIED OIL & GAS SERVICES, LLC 059996

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Medicine Lodge, KS

DATE <u>11-11-2013</u>	SEC <u>14</u>	TWP <u>35S</u>	RANGE <u>8W</u>	CALLED OUT <u>1:30 pm</u>	ON LOCATION <u>10:00 AM</u>	JOB START <u>5:45 pm</u>	JOB FINISH <u>7:00 pm</u>
LEASE <u>3508</u>	WELL # <u>6-14H</u>	LOCATION <u>Offices, KS South to Hwy #2</u>			COUNTY <u>Harper</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)		<u>east to Wagon Rd, 10 S, 1 E, 4th, -line</u>					

CONTRACTOR Larisa #20 OWNER Scenic Ridge Energy

TYPE OF JOB Intervention
 HOLE SIZE 8 3/4 T.D. 5850'
 CASING SIZE 7" 26lb DEPTH 5840'
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX 3,000 psi MINIMUM _____
 MEAS. LINE _____ SHOE JOINT 87'
 CEMENT LEFT IN CSG. _____
 PERFS. _____
 DISPLACEMENT 220 bbls of Fresh water

CEMENT
 AMOUNT ORDERED 240 sq 50:50 Poz+2%
Gel +.4% FL160 +.1% C-51, 100sx
C19SS B +.8% FL160 +.2% CD-31, 6.95M ASF
 COMMON C19SS B 100sx @ 17.90 1,790.00
 POZMIX _____ @ _____
 GEL _____ @ _____
 CHLORIDE _____ @ _____
 ASC _____ @ _____
Super Flush 30 bbls @ 58.70 1,761.00
Allen Solso Poz 240 @ 14.40 3,456.00
Fluid loss 157 lbs @ 18.90 2,967.30
C-51 21 lbs @ 17.55 368.55
CD-31 19 lbs @ 10.80 195.70
Addition Hours 3 @ 440.00 1,320.00
 @ _____
 @ _____
 HANDLING 351.84 cu ft @ 2.48 872.56
 MILEAGE 603.16 Ton mile 2.60 1,568.22
 TOTAL 14,299.33

REMARKS:

Pipe on bottom & break circulation, pressure test to 3,000 psi; pump 30 bbls ASF, mix 240 sx test cement, mix 100sx + gel cement. Shut down, release plus, serve displacement 1.1 ft pressure at 160 bbls, slow rate to 300pm at 210 bbls, bump plus at 220 bbls 1000-1500 psi, plus s.d. hole

'AFE Number: 0613289
 Well Name: IT Unit 3508 6-14H

CHARGE # 830 370
 Amount: 12,779.92
 STREET Co. Man: Bill Tomlinson
 CITY Co. Man Sig: Bill Tomlinson
 Notes: _____

SERVICE

DEPTH OF JOB 5850'
 PUMP TRUCK CHARGE _____ 3,099.25
 EXTRA FOOTAGE _____ @ _____
 MILEAGE 40 @ 7.70 308.00
 MANIFOLD Hecoren+91 @ _____ 275.00
Light Vehicle 40 @ 4.40 176.00
 @ _____

TOTAL 3,858.25

PLUG & FLOAT EQUIPMENT

7"
1-Rubber Plug @ _____ 99.45
 @ _____
 @ _____
 @ _____

TOTAL 99.45

SALES TAX (If Any) _____

TOTAL CHARGES 18,257.03

DISCOUNT 30% IF PAID IN 30 DAYS

\$12,779.92

To: Allied Oil & Gas Services, LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Bill Tomlinson

SIGNATURE Bill Tomlinson

Thank you!!!

ALLIED OIL & GAS SERVICES, LLC 059597

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Medicine Lodge, KS.

DATE <u>1/4/2013</u>	SEC <u>14</u>	TWP. <u>35 S</u>	RANGE <u>8W</u>	CALLED OUT <u>10:30 AM</u>	ON LOCATION <u>11:30 AM</u>	JOB START <u>5:35 PM</u>	JOB FINISH <u>6:36 PM</u>
LEASE <u>Lit Trust</u>	WELL # <u>508</u>	LOCATION <u>Allica, KS. South to Hwy #2 East</u>	COUNTY <u>Harper</u>	STATE <u>Kansas</u>			
OLD OR <input checked="" type="checkbox"/> NEW (Circle one)		<u>to Waldron Rd. 10 S. to 100th East 1/2 N. E/S</u>					

CONTRACTOR <u>Lariat Rig #20</u>	OWNER <u>Sandridge Energy</u>
TYPE OF JOB <u>Surface</u>	CEMENT AMOUNT ORDERED
HOLE SIZE <u>12 1/4"</u>	T.D. <u>770'</u>
CASING SIZE <u>9 5/8 x 3/4"</u>	DEPTH <u>769'</u>
TUBING SIZE	DEPTH <u>255 sx 65:35:676cc + 22KCC + 14" Floseal</u>
DRILL PIPE	DEPTH <u>150 sx Class A + 22KCC + 14" Floseal</u>
TOOL	DEPTH
PRES. MAX <u>900</u>	MINIMUM
MEAS. LINE	SHOE JOINT <u>43.95'</u>
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT <u>56 1/2 Bbls Freshwater</u>	
EQUIPMENT	
PUMP TRUCK # <u>548-545</u>	CEMENTER <u>Carl Balding</u>
BULK TRUCK # <u>421-290</u>	DRIVER <u>Carl Pickett</u>
BULK TRUCK #	DRIVER
HANDLING <u>448.31</u>	MILEAGE <u>768.86 / 2.60</u>
TOTAL <u>10,946.28</u>	

REMARKS:
Have safety meeting + rig up, Run 769'
9 5/8 casing. Have safety meeting + pressure test
to 200 psi. Mix 255 sx lead cement +
150 sx tail cement. Release plug. Displace
with 56 1/2 Bbls Freshwater Pump fully
Release pressure + float held
Circulate 100 sx cement to surface.

DEPTH OF JOB <u>769.92</u>	
PUMP TRUCK CHARGE <u>2058.50</u>	
EXTRA FOOTAGE	
MILEAGE <u>40</u>	@ <u>7.70</u> <u>308.00</u>
MANIFOLD	@ <u>2.75</u> <u>275.00</u>
AFE Number <u>140</u>	@ <u>4.40</u> <u>176.00</u>
Well Name: <u>LET Trust</u>	
Code: <u>820.360</u>	
Amount: <u>13,948.64</u>	TOTAL <u>1017.50</u>
Co. Man: <u>Bill Tomlinson</u>	

CHARGE TO: Sandridge Energy

STREET _____

CITY _____ STATE _____

ZIP _____

Co. Man Sig.: Bill Tomlinson

Notes: _____

<u>1" Rubber plug</u>	@	<u>184.86</u>
	@	
	@	
	@	
	@	
TOTAL		<u>184.86</u>

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Bill Tomlinson

SIGNATURE Bill Tomlinson

SALES TAX (If Any) _____

TOTAL CHARGES 13,948.64

DISCOUNT _____ IF PAID IN 30 DAYS

NET 9764.05

Sandridge

Location	Kansas	Installation	Harper County
Field	Sec 14 - 35S - 8W	Well	LIT Trust 3508 6-14H
Installation Data			
Name	Longitude	Northing	Easting
Harper County	W98 9 50.87	120823.00	208698.00
Coordinate System	Kansas State Planes, Southern Zone		
Slot Data			
Name	North [ft]	East [ft]	Easting
LIT Trust 3508 6-14H	3155.81 N	3945.76 E	123979.00
Elevation Data			
Slot - Mean Sea Level [ft]	Slot - Mudline/Ground level [ft]		
0.00	0.00		



9630 Pole Rd.
Oklahoma City, OK 73160
Tel: (405) 604-2969

WELL PROFILE DATA

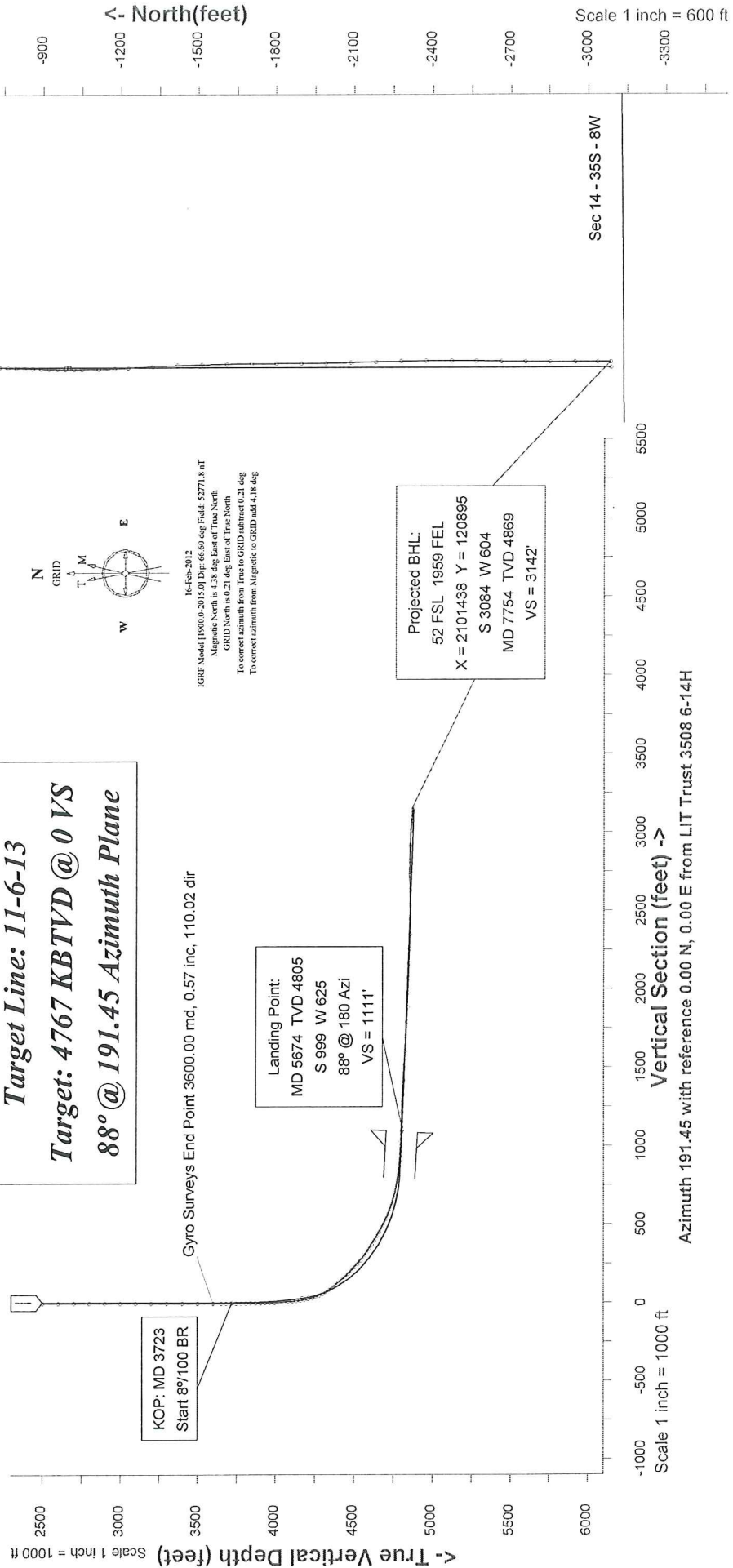
Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Top on KOP	3723.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00
End of Build	4207.85	36.79	270.03	3723.00	0.00	0.00	0.00	31.26
End of Hold	4265.56	38.79	270.03	4171.66	0.09	-157.94	8.00	38.42
Target LIT Trust 3508	5361.59	87.00	180.00	4216.64	0.11	-194.09	0.00	796.89
Target LIT Trust 3508	5661.59	87.00	180.00	4788.75	-686.50	-624.96	8.00	1090.52
Target LIT Trust 3508	5674.15	88.00	180.00	4804.45	-986.09	-624.96	8.00	1102.88
T.D. & Target LIT Trust	7762.54	88.00	180.00	4877.80	-3085.83	-624.96	8.00	3148.48

TARGET DATA

MD	Inc	Azi	North	East	Name	Position
5361.59	87.00	180.00	4788.75	-686.50	LIT Trust 3508 6-14H - 87°	2101417.00 East : 123282.46 North
5661.59	87.00	180.00	4804.45	-986.09	LIT Trust 3508 6-14H - End 87°	2101417.00 East : 122892.65 North
5674.15	88.00	180.00	4805.00	-986.70	LIT Trust 3508 6-14H - LP	2101417.00 East : 122880.24 North
7762.54	88.00	180.00	4877.80	-3085.83	LIT Trust 3508 6-14H - BHL	2101417.00 East : 120892.99 North

Created by: admin
Date Plotted: 18-Nov-2013
Plot reference is LIT Trust 3508 6-14H (Plan).
Ref wellpath is LIT Trust 3508 6-14H (PWPF1).
Coordinates are in feet reference LIT Trust 3508 6-14H.
True Vertical Depths are reference LIT Trust 3508 6-14H.
Measured Depths are reference Slot.
Plot North is aligned to GRID North.

16-Feb-2012
ICRF Model [1900.0-2015.0] Dip: 46.00 deg; Tide: 3271.8 mT
Magnetic North is 4.38 deg East of True North
GRID North is 0.21 deg East of True North
To convert azimuth from True to GRID subtract 0.21 deg
To convert azimuth from Magnetic to GRID add 4.18 deg



East (feet) ->

North (feet)

Scale 1 inch = 600 ft

Vertical Section (feet) ->

Scale 1 inch = 1000 ft

Azimuth 191.45 with reference 0.00 N, 0.00 E from LIT Trust 3508 6-14H

Sec 14 - 35S - 8W

Scale 1 inch = 1000 ft

KOP: MD 3723
Start 87/100 BR

Landing Point:
MD 5674 TVD 4805
S 999 W 625
88° @ 180 Azi
VS = 1111'

Projected BHL:
52 FSL 1959 FEL
X = 2101438 Y = 120895
S 3084 W 604
MD 7754 TVD 4869
VS = 3142'

Target Line: 11-6-13
Target: 4767 KBTVD @ 0 VS
88° @ 191.45 Azimuth Plane

Scale 1 inch = 1000 ft

Gyro Surveys End Point 3600.00 md, 0.57 inc, 110.02 dir



Standard Wellpath Report
 Sandridge
 Sec 14 - 35S - 8W, Kansas
 Harper County
 Wellbore: LIT Trust 3508 6-14H (Actual)

Wellbore

Name	Created	Last Revised
LIT Trust 3508 6-14H (Actual)	22-Oct-2013	18-Nov-2013

Well

Name	Government ID	Last Revised
LIT Trust 3508 6-14H		22-Oct-2013

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
LIT Trust 3508 6-14H	123979.0000	2102042.0000	N37 0 23.8650	W98 9 2.0833	3155.81N	3945.76E

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Harper County	2098096.0000	120823.0000	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
Sec 14 - 35S - 8W	2098096.0000	120823.0000	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Created By

Comments
<p>Surveys to MD 3600' provided by Gyro.</p> <p>FINAL SURVEYS: MD 7754 is a projection to bit @ TD</p>



Standard Wellpath Report
 Sandridge
 Sec 14 - 35S - 8W, Kansas
 Harper County
 Wellbore: LIT Trust 3508 6-14H (Actual)

Wellpath (Grid) Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	2102042.00	123979.00
100.00	0.44	57.400	100.00	0.21N	0.32E	0.44	-0.27	2102042.32	123979.21
200.00	0.28	58.680	200.00	0.54N	0.86E	0.16	-0.70	2102042.86	123979.54
300.00	0.45	61.400	299.99	0.86N	1.41E	0.17	-1.12	2102043.41	123979.86
400.00	0.24	76.650	399.99	1.09N	1.96E	0.23	-1.46	2102043.96	123980.09
500.00	0.08	89.970	499.99	1.14N	2.23E	0.16	-1.56	2102044.23	123980.14
600.00	0.11	111.020	599.99	1.11N	2.39E	0.05	-1.56	2102044.39	123980.11
700.00	0.29	126.770	699.99	0.92N	2.68E	0.19	-1.43	2102044.68	123979.92
800.00	0.09	123.110	799.99	0.73N	2.95E	0.20	-1.30	2102044.95	123979.73
900.00	0.06	122.700	899.99	0.65N	3.06E	0.03	-1.25	2102045.06	123979.65
1000.00	0.21	108.730	999.99	0.57N	3.28E	0.15	-1.21	2102045.28	123979.57
1100.00	0.21	107.840	1099.99	0.45N	3.63E	==>	-1.16	2102045.63	123979.45
1200.00	0.19	93.350	1199.99	0.39N	3.97E	0.05	-1.17	2102045.97	123979.39
1300.00	0.18	59.820	1299.99	0.46N	4.27E	0.11	-1.29	2102046.27	123979.46
1400.00	0.38	47.990	1399.99	0.76N	4.65E	0.21	-1.66	2102046.65	123979.76
1500.00	0.19	41.350	1499.99	1.10N	5.01E	0.19	-2.08	2102047.01	123980.10
1600.00	0.22	36.510	1599.99	1.38N	5.23E	0.03	-2.39	2102047.23	123980.38
1700.00	0.18	23.100	1699.99	1.68N	5.41E	0.06	-2.72	2102047.41	123980.68
1800.00	0.15	17.310	1799.98	1.95N	5.51E	0.03	-3.00	2102047.51	123980.95
1900.00	0.09	21.790	1899.98	2.15N	5.57E	0.06	-3.21	2102047.58	123981.15
2000.00	0.11	26.290	1999.98	2.31N	5.65E	0.02	-3.38	2102047.65	123981.31
2100.00	0.06	147.180	2099.98	2.35N	5.72E	0.15	-3.44	2102047.72	123981.35
2200.00	0.14	201.580	2199.98	2.19N	5.70E	0.12	-3.28	2102047.70	123981.19
2300.00	0.24	210.880	2299.98	1.90N	5.55E	0.10	-2.96	2102047.55	123980.90
2400.00	0.15	229.380	2399.98	1.63N	5.34E	0.11	-2.66	2102047.34	123980.63
2500.00	0.28	262.370	2499.98	1.52N	5.00E	0.17	-2.48	2102047.00	123980.52
2600.00	0.25	287.340	2599.98	1.55N	4.55E	0.12	-2.42	2102046.55	123980.55
2700.00	0.30	284.830	2699.98	1.68N	4.09E	0.05	-2.46	2102046.09	123980.68
2800.00	0.34	293.650	2799.98	1.87N	3.56E	0.06	-2.54	2102045.56	123980.87
2900.00	0.30	312.520	2899.98	2.16N	3.10E	0.11	-2.73	2102045.10	123981.16
3000.00	0.14	322.570	2999.98	2.44N	2.83E	0.16	-2.95	2102044.83	123981.44
3100.00	0.03	308.770	3099.98	2.55N	2.74E	0.11	-3.04	2102044.74	123981.55
3200.00	0.09	222.500	3199.98	2.51N	2.66E	0.09	-2.99	2102044.66	123981.51
3300.00	0.31	103.510	3299.98	2.39N	2.87E	0.36	-2.91	2102044.87	123981.39
3400.00	0.46	105.670	3399.97	2.22N	3.52E	0.15	-2.87	2102045.52	123981.22
3500.00	0.70	95.860	3499.97	2.04N	4.52E	0.26	-2.90	2102046.52	123981.04
3600.00	0.57	110.020	3599.96	1.81N	5.59E	0.20	-2.89	2102047.59	123980.81
3652.00	0.40	73.300	3651.96	1.78N	6.01E	0.66	-2.93	2102048.01	123980.78
3684.00	0.80	278.300	3683.96	1.84N	5.89E	3.67	-2.97	2102047.90	123980.84
3715.00	2.60	274.700	3714.94	1.93N	4.98E	5.81	-2.88	2102046.98	123980.93
3747.00	4.50	275.900	3746.88	2.12N	3.01E	5.94	-2.67	2102045.01	123981.12
3779.00	6.70	277.200	3778.73	2.48N	0.09W	6.89	-2.41	2102041.91	123981.48
3810.00	8.30	279.600	3809.46	3.08N	4.09W	5.26	-2.21	2102037.91	123982.08
3842.00	10.10	278.700	3841.05	3.89N	9.15W	5.64	-2.00	2102032.85	123982.89
3874.00	12.40	277.100	3872.43	4.74N	15.33W	7.25	-1.60	2102026.67	123983.74
3906.00	14.80	276.500	3903.53	5.63N	22.80W	7.51	-0.99	2102019.20	123984.63
3937.00	18.00	274.900	3933.27	6.48N	31.51W	10.42	-0.10	2102010.49	123985.48
3969.00	20.20	273.700	3963.50	7.26N	41.95W	6.98	1.21	2102000.05	123986.26
4001.00	21.60	274.100	3993.40	8.04N	53.34W	4.40	2.71	2101988.66	123987.04
4033.00	23.60	273.200	4022.94	8.82N	65.61W	6.34	4.38	2101976.39	123987.82
4064.00	26.10	273.100	4051.07	9.53N	78.62W	8.07	6.26	2101963.38	123988.54
4096.00	28.80	273.300	4079.46	10.36N	93.34W	8.44	8.38	2101948.65	123989.36
4128.00	31.50	273.100	4107.13	11.26N	109.39W	8.44	10.68	2101932.60	123990.26
4160.00	34.40	273.100	4133.98	12.20N	126.77W	9.06	13.21	2101915.22	123991.20
4191.00	37.30	272.100	4159.10	13.01N	144.90W	9.54	16.01	2101897.09	123992.02
4223.00	39.80	269.400	4184.13	13.26N	164.84W	9.42	19.72	2101877.15	123992.26
4255.00	41.40	266.400	4208.43	12.49N	185.64W	7.89	24.61	2101856.35	123991.49
4287.00	42.30	262.400	4232.27	10.40N	206.88W	8.80	30.87	2101835.11	123989.40
4318.00	43.00	259.000	4255.07	7.00N	227.60W	7.77	38.31	2101814.39	123986.00
4350.00	44.20	255.100	4278.25	2.05N	249.10W	9.20	47.43	2101792.89	123981.05
4382.00	46.00	251.000	4300.84	4.56S	270.76W	10.68	58.22	2101771.22	123974.44
4413.00	47.50	247.700	4322.08	12.53S	291.88W	9.14	70.22	2101750.10	123966.47
4445.00	48.30	245.000	4343.54	22.06S	313.63W	6.74	83.87	2101728.35	123956.94
4477.00	49.40	242.500	4364.60	32.72S	335.23W	6.81	98.61	2101706.75	123946.28
4509.00	51.00	240.400	4385.08	44.47S	356.82W	7.10	114.41	2101685.16	123934.53
4541.00	51.50	238.500	4405.11	57.16S	378.31W	4.89	131.11	2101663.66	123921.84
4572.00	51.80	236.300	4424.35	70.25S	398.79W	5.65	148.01	2101643.19	123908.74
4604.00	51.60	233.100	4444.19	84.76S	419.28W	7.87	166.30	2101622.69	123894.23
4636.00	51.40	229.300	4464.11	100.45S	438.79W	9.31	185.55	2101603.18	123878.55
4667.00	51.70	225.700	4483.39	116.85S	456.69W	9.15	205.17	2101585.29	123862.15

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 Coordinates are from Slot MD's are from Slot and TVD's are from Slot (LIT Trust 3508 6-14H 0.00ft above Mean Sea Level)
 Vertical Section is from 0.00N 0.00E on azimuth 191.450 degrees
 Bottom hole distance is 3142.48 Feet on azimuth 191.08 degrees from Wellhead
 Calculation method uses Minimum Curvature method
 Prepared by
 Date Printed: 18-Nov-2013



Standard Wellpath Report
 Sandridge
 Sec 14 - 35S - 8W, Kansas
 Harper County
 Wellbore: LIT Trust 3508 6-14H (Actual)

Wellpath (Grid) Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
4699.00	51.60	222.300	4503.25	134.89S	474.12W	8.34	226.32	2101567.86	123844.10
4731.00	52.20	218.600	4523.00	154.05S	490.45W	9.29	248.34	2101551.53	123824.94
4763.00	52.90	215.500	4542.46	174.32S	505.75W	8.00	271.24	2101536.22	123804.67
4795.00	54.00	212.500	4561.52	195.63S	520.11W	8.28	294.98	2101521.85	123783.35
4827.00	55.80	209.700	4579.92	218.05S	533.63W	9.10	319.64	2101508.34	123760.94
4858.00	57.40	207.100	4596.99	240.82S	545.93W	8.70	344.39	2101496.04	123738.17
4890.00	58.60	204.400	4613.95	265.26S	557.72W	8.08	370.68	2101484.25	123713.73
4922.00	59.60	201.100	4630.38	290.57S	568.33W	9.38	397.60	2101473.64	123688.41
4954.00	60.70	198.400	4646.31	316.69S	577.70W	8.08	425.06	2101464.26	123662.29
4985.00	61.30	195.100	4661.34	342.65S	585.51W	9.51	452.06	2101456.45	123636.33
5017.00	61.90	192.400	4676.57	369.99S	592.20W	7.65	480.18	2101449.77	123608.99
5049.00	63.10	190.000	4691.34	397.83S	597.71W	7.64	508.56	2101444.26	123581.15
5080.00	65.20	188.400	4704.86	425.37S	602.17W	8.21	536.43	2101439.80	123553.61
5112.00	66.90	186.700	4717.85	454.36S	606.00W	7.20	565.61	2101435.96	123524.62
5144.00	68.90	185.500	4729.89	483.84S	609.15W	7.15	595.12	2101432.81	123495.14
5176.00	71.90	185.000	4740.62	513.85S	611.91W	9.49	625.09	2101430.05	123465.12
5208.00	74.30	184.600	4749.92	544.36S	614.47W	7.59	655.50	2101427.49	123434.61
5239.00	76.70	184.200	4757.69	574.28S	616.77W	7.84	685.28	2101425.19	123404.68
5271.00	79.00	183.300	4764.42	605.50S	618.82W	7.70	716.28	2101423.15	123373.47
5303.00	80.60	182.500	4770.09	636.95S	620.41W	5.57	747.42	2101421.55	123342.01
5335.00	82.70	182.200	4774.73	668.58S	621.71W	6.63	778.68	2101420.26	123310.38
5366.00	83.00	181.800	4778.59	699.32S	622.78W	1.60	809.03	2101419.18	123279.64
5398.00	83.90	182.200	4782.24	731.09S	623.89W	3.07	840.39	2101418.07	123247.86
5430.00	85.40	182.700	4785.23	762.92S	625.25W	4.94	871.85	2101416.71	123216.03
5461.00	85.60	182.100	4787.66	793.80S	626.55W	2.03	902.37	2101415.42	123185.15
5493.00	85.80	182.000	4790.06	825.69S	627.69W	0.70	933.85	2101414.27	123153.26
5525.00	86.10	181.700	4792.32	857.59S	628.72W	1.32	965.33	2101413.24	123121.36
5557.00	86.50	181.000	4794.38	889.52S	629.47W	2.52	996.77	2101412.49	123089.43
5588.00	87.30	180.900	4796.06	920.47S	629.98W	2.60	1027.20	2101411.98	123058.48
5620.00	87.90	180.900	4797.40	952.44S	630.49W	1.88	1058.63	2101411.48	123026.51
5652.00	88.60	180.500	4798.38	984.42S	630.88W	2.52	1090.06	2101411.09	122994.52
5684.00	88.80	180.000	4799.10	1016.41S	631.02W	1.68	1121.44	2101410.95	122962.53
5715.00	88.90	179.600	4799.73	1047.40S	630.91W	1.33	1151.79	2101411.05	122931.54
5779.00	88.60	179.000	4801.12	1111.38S	630.13W	1.05	1214.35	2101411.84	122867.55
5894.00	86.40	177.000	4806.14	1226.19S	626.12W	2.58	1326.07	2101415.84	122752.74
5989.00	86.10	176.500	4812.35	1320.83S	620.75W	0.61	1417.77	2101421.22	122658.09
6085.00	86.70	178.000	4818.38	1416.53S	616.15W	1.68	1510.65	2101425.81	122562.39
6180.00	87.40	178.600	4823.27	1511.36S	613.33W	0.97	1603.03	2101428.63	122467.55
6276.00	86.90	179.700	4828.04	1607.23S	611.91W	1.26	1696.71	2101430.05	122371.67
6372.00	87.10	178.700	4833.07	1703.09S	610.57W	1.06	1790.40	2101431.39	122275.81
6467.00	87.40	180.000	4837.62	1797.97S	609.50W	1.40	1883.18	2101432.47	122180.92
6563.00	88.50	179.800	4841.06	1893.91S	609.33W	1.16	1977.17	2101432.63	122084.98
6658.00	88.60	179.000	4843.46	1988.87S	608.34W	0.85	2070.05	2101433.63	121990.01
6754.00	87.90	178.100	4846.39	2084.79S	605.91W	1.19	2163.58	2101436.06	121894.08
6850.00	87.40	178.200	4850.33	2180.66S	602.81W	0.53	2256.93	2101439.15	121798.21
6945.00	88.00	178.400	4854.14	2275.54S	600.00W	0.67	2349.36	2101441.97	121703.32
7041.00	90.30	180.100	4855.57	2371.52S	598.74W	2.98	2443.17	2101443.23	121607.34
7137.00	91.50	180.000	4854.06	2467.50S	598.82W	1.25	2537.27	2101443.14	121511.35
7232.00	91.30	180.800	4851.74	2562.47S	599.49W	0.87	2630.48	2101442.48	121416.38
7328.00	89.90	180.900	4850.73	2658.45S	600.91W	1.46	2724.83	2101441.05	121320.39
7424.00	89.50	180.500	4851.24	2754.44S	602.08W	0.59	2819.15	2101439.88	121224.39
7520.00	88.00	180.600	4853.33	2850.41S	603.00W	1.57	2913.39	2101438.96	121128.42
7616.00	85.90	180.300	4858.44	2946.27S	603.76W	2.21	3007.49	2101438.21	121032.56
7704.00	85.40	180.100	4865.11	3034.01S	604.06W	0.61	3093.55	2101437.90	120944.81
7754.00	85.40	180.100	4869.12	3083.85S	604.15W	==>	3142.41	2101437.81	120894.96

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Sandridge
Sec 14 - 35S - 8W, Kansas
Harper County
Wellbore: LIT Trust 3508 6-14H (Actual)

Comments

MD[ft]	TVD[ft]	North[ft]	East[ft]	Comment
3600.00	3599.96	1.81N	5.59E	Gyro Surveys End Point

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