



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1189504
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 |
|-----------------------------------|-----------------|---|

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: _____

1189504

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No 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: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum |
|--|---|

| 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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL: _____ _____ |
|--|---|---|

| | |
|-----------|--|
| Form | ACO1 - Well Completion |
| Operator | SandRidge Exploration and Production LLC |
| Well Name | Lit Trust 3508 5-14H |
| Doc ID | 1189504 |

Perforations

| Shots Per Foot | Perforation Record | Material Record | Depth |
|----------------|--------------------|-----------------|-----------|
| 5 | 5222-5224 | frac | 5772-5903 |
| 5 | 5318-5320 | | |
| 5 | 5468-5470 | | |
| 5 | 5772-5775 | | |
| 5 | 5829-5832 | | |
| 5 | 5900-5903 | | |
| 5 | 5972-5975 | frac | 5972-6135 |
| 5 | 6052-6055 | | |
| 5 | 6132-6135 | | |
| 5 | 6207-6210 | frac | 6207-6340 |
| 5 | 6272-6275 | | |
| 5 | 6337-6340 | | |
| 5 | 6447-6450 | frac | 6447-6578 |
| 5 | 6512-6515 | | |
| 5 | 6575-6578 | | |
| 5 | 6675-6678 | frac | 6675-6804 |
| 5 | 6739-6742 | | |
| 5 | 6801-6804 | | |
| 5 | 6873-6876 | frac | 6873-7070 |
| 5 | 6923-6926 | | |
| 5 | 6998-7001 | | |
| 5 | 7068-7071 | | |
| 5 | 7047-7150 | frac | 7147-7235 |
| 5 | 7232-7235 | | |

| | |
|-----------|--|
| Form | ACO1 - Well Completion |
| Operator | SandRidge Exploration and Production LLC |
| Well Name | Lit Trust 3508 5-14H |
| Doc ID | 1189504 |

Perforations

| Shots Per Foot | Perforation Record | Material Record | Depth |
|----------------|--------------------|-----------------|-----------|
| 5 | 7317-7320 | frac | 7317-7484 |
| 5 | 7405-7408 | | |
| 5 | 7481-7484 | | |
| 5 | 7547-7550 | frac | 7547-7688 |
| 5 | 7611-7614 | | |
| 5 | 7685-7688 | | |

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: | 15-077-21974-00-00 |
| Operator Name: | SandRidge Energy |
| Well Name and Number: | Lit Trust 3508 5-14H |
| Longitude: | -98.15050878 |
| Latitude: | 37.00662921 |
| Datum: | NAD27 |
| Federal/Tribal Well: | NO |
| True Vertical Depth: | 4,895 |
| Total Base Water Volume (gal): | 2,308,698 |
| 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 | 94.80521 | None |
| Sand (Proppant) | Company 2 | Proppant | | | | | |
| | | | Silica Substrate | NA | 100.00000 | 4.32166 | None |
| Hydrochloric Acid (15%) | Company 2 | Acidizing | | | | | |
| | | | Hydrochloric Acid | 7647-01-0 | 15.00000 | 0.10849 | None |
| | | | NONYL PHENOL, 4 MOL | 104-40-5 | 10.00000 | 0.00508 | None |
| | | | Methyl Alcohol | 67-56-1 | 80.00000 | 0.00090 | None |
| | | | thiourea-formaldehyde copolymer | 68527-49-1 | 15.00000 | 0.00017 | None |
| AIC | Archer | Liquid Acid Iron Control | | | | | |
| | | | Acrylamide modified copolymer | NA | 60.00000 | 0.00755 | None |
| | | | Aliphatic hydrocarbon | 64742-47-8 | 30.00000 | 0.00377 | None |
| | | | Acetic Acid | 64-19-7 | 50.00000 | 0.00204 | None |
| | | | Citric Acid | 77-92-9 | 30.00000 | 0.00122 | None |
| | | | Ammonium chloride | 12125-02-9 | 5.00000 | 0.00063 | None |
| | | | Oxyalkylated Alcohol | NA | 5.00000 | 0.00063 | 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 | | 0.04877 |
| | | WATER | 7732-18-5 | | 0.03047 |
| | | Anionic Polymer | N/A | | 0.02439 |
| | | Aliphatic Hydrocarbon | 64742-47-8 | | 0.02439 |
| | | TRADE SECRET | N/A | | 0.02031 |
| | | Water | 7732-18-5 | | 0.01132 |
| | | ISOPROPANOL | 67-63-0 | | 0.00508 |
| | | METHANOL | 67-56-1 | | 0.00508 |
| | | Oxyalkylated Alcohol | 68002-97-1 | | 0.00406 |
| | | Polyol Ester | N/A | | 0.00406 |
| | | Water | 7732-18-5 | | 0.00377 |
| | | Sodium Salt of Phosphate Ester | 68131-72-6 | | 0.00189 |
| | | Acrylic Polymer | 28205-96-1 | | 0.00189 |
| | | Water | 7732-18-5 | | 0.00142 |
| | | Polyglycol Ester | N/A | | 0.00081 |
| | | Polyol Ester | N/A | | 0.00063 |
| | | Alkanolamide | N/A | | 0.00063 |
| | | Alcohol Ethoxylate Surfactants | N/A | | 0.00017 |
| | | Ammonium salt | 7783-18-8 | | 0.00013 |
| | | Oxyalkylated fatty Acid Derivative | N/A | | 0.00013 |
| | | Alkanolamine | 111-42-2 | | 0.00013 |
| | | Surfactant | N/A | | 0.00013 |
| | | n-olefins | N/A | | 0.00009 |
| | | Tetrasodium Ethylenediaminetetraacetate | 64-02-8 | | 0.00008 |
| | | 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 | 4289 |

| |
|--|
| BILL TO |
| SANDRIDGE ENERGY, INC. ATIN: 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 | 3323 | LARIAT 20 | LIT TRUST 3508 514H | 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 MOUSEHOLE
 FURNISHED 8' X 8' 1/2" PLATE FOR WELL COVER
 FURNISHED 4 - 10' X 10' PANELS FOR SAFETY BARRIER

TOTAL BID \$ 19,000.00

AFE Number: DC 13287
 Well Name: Lit Trust 3508 5-14 H
 Code: 830-090
 Amount: 19170.85
 Co. Man: John Fortune
 Co. Man S: [Signature]
 Notes: _____

| | |
|--------------------------|----------|
| Sales Tax (6.15%) | \$170.85 |
|--------------------------|----------|

| | |
|--------------|-------------|
| TOTAL | \$19,170.85 |
|--------------|-------------|

ALLIED OIL & GAS SERVICES, LLC 059614

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Medicine Lake KS

| | | | | | | | |
|------------------------------------|--------------------------|--|------------------|------------|----------------------------|---------------------------|---------------------------|
| DATE <u>11-21-13</u> | SEC <u>14</u> | TWP. <u>35 S</u> | RANGE <u>8 W</u> | CALLED OUT | ON LOCATION <u>8:30 PM</u> | JOB START <u>12:30 PM</u> | JOB FINISH <u>1:30 PM</u> |
| LEASE <u>Lt Trust</u> | WELL.# <u>3508-S-14H</u> | LOCATION <u>Attila KS South 7th Hwy 2 East to Waldron Rd Stolcott Rd 1E 1/2 N E into</u> | | | COUNTY <u>Hoggar</u> | STATE <u>KS</u> | |
| OLD OR NEW (Circle one) <u>NEW</u> | | | | | | | |

CONTRACTOR Lapit 20
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4 I.D. 770
 CASING SIZE 9 5/8 DEPTH 770
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX 1500 MINIMUM
 MEAS. LINE SHOE JOINT 43.48'
 CEMENT LEFT IN CSG. 43.48'
 PERFS.
 DISPLACEMENT 56.5 BBL
 EQUIPMENT
David Felo
 PUMP TRUCK CEMENTER JACK HOAGAN
 # 548/545 HELPER Justin Bower
 BULK TRUCK
 # 514/553 DRIVER Desedrick Carter
 BULK TRUCK
 # DRIVER

OWNER Sandridge Energy
 CEMENT
 AMOUNT ORDERED 255 sx 6.5155:6%gel + 276cc + 1/4 floeal
150 sx Class A1 2% C.C + 1/4 # Floeal
 COMMON 150 @ 17.90 2685.00
 POZMIX @
 GEL @
 CHLORIDE 4 @ 64.00 256.00
 ASC @
Floesal 3 # @ 297 112.86
 @
 @
Allied LWC T1 255 sx @ 16.50 4207.50
Calcium Chloride 6 @ 64 384.00
Floesal 6 # @ 287 190.08
 @
 @
 HANDLING 448.31 @ 2.48 1111.80
 MILEAGE 768.86 TONE 2.60 1999.04
 TOTAL 10,946.28

REMARKS:
 AFE Number: 215287
 Well Name: Lt Trust 3508 S 14H
 Code: 930-360
 Amount: 9764.05
 Co. Man: JAMES HOAGAN
 Co. Man Sig: [Signature]
 Notes:

CHARGE TO: Sandridge Energy
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE
 DEPTH OF JOB 770
 PUMP TRUCK CHARGE 2058.50
 EXTRA FOOTAGE @
 MILEAGE 40 @ 7.70 308.00
 MANIFOLD 958 @ 275.00 275.00
 LV Mileage 40 @ 4.40 176.00
 @
 TOTAL 2817.50

PLUG & FLOAT EQUIPMENT
9 5/8
Top Rubber plug 1 @ 184.86 184.86
 @
 @
 @
 TOTAL 184.86

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.

SALES TAX (If Any) _____
 TOTAL CHARGES 13,948.64
 DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME James Hoagan
 SIGNATURE [Signature]

9764.05

ALLIED OIL & GAS SERVICES, LLC 062354

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Medicine Lodge KS

| | | | | | | | |
|----------------------------------|-----------------------|--|-----------------|------------|--------------------------|-------------------------|--------------------------|
| DATE <u>11/28/13</u> | SEC. <u>14</u> | TWP. <u>35s</u> | RANGE <u>8w</u> | CALLED OUT | ON LOCATION <u>900AM</u> | JOB START <u>1100AM</u> | JOB FINISH <u>1230PM</u> |
| LEASE <u>Trust</u> | WELL # <u>350854H</u> | LOCATION <u>Attica, KS, South to Hwy 2, East</u> | | | COUNTY <u>Harper</u> | STATE <u>KS</u> | |
| OLD OR <u>(NEW)</u> (Circle one) | | to Waldran Rd, South to 100 th Rd, East 1/2 North East into | | | | | |

CONTRACTOR Lariat #20 OWNER Sandridge Energy

| | |
|---|--|
| TYPE OF JOB <u>Intermediate</u> | CEMENT |
| HOLE SIZE <u>8 1/2</u> | AMOUNT ORDERED <u>2400x Class A 50:50:2% Gel + 4% FL-160 + 1% C-51, 1000x Class A + 8% FL-160 + 2% C-51, 3000L Super Flush</u> |
| CASING SIZE <u>7</u> | COMMON <u>Class A 1000 @ 17.90 1790.00</u> |
| TUBING SIZE | POZMIX @ |
| DRILL PIPE | GEL @ |
| TOOL | CHLORIDE @ |
| PRES. MAX <u>1400</u> | ASC @ |
| MEAS. LINE | <u>Super Flush 3000L @ 58.70 1761.00</u> |
| CEMENT LEFT IN CSG. <u>86</u> | <u>Allied 50/50 Poz Blend-A 2400 @ 14.40 3456.00</u> |
| PERFS. | <u>Fluid Loss FL-160 811 @ 18.90 1530.90</u> |
| DISPLACEMENT <u>215 1/4 BBLs Fresh H₂O</u> | <u>C-51 211 @ 17.55 368.55</u> |

| | | | |
|-----------------------------|------------------------------|--|-----------------------|
| EQUIPMENT | | HANDLING <u>351.84 cu ft @ 2.48 872.56</u> | |
| PUMP TRUCK # <u>558/555</u> | CEMENTER <u>Dean Thimack</u> | MILEAGE <u>603.16 hr-mi X 2.60 1568.22</u> | TOTAL <u>12947.33</u> |
| BULK TRUCK # <u>381/252</u> | HELPER <u>Scott Paddy</u> | | |
| BULK TRUCK # | DRIVER <u>Carl Rackley</u> | | |
| | DRIVER | | |

REMARKS:

AFE Number: OC 3287
Well Name: Lit Trust
Code: 930-370
Amount: 11855.92
Co. Man: Robert White
Co. Man Sig.: Robert White
Notes:

SERVICE

| | |
|-----------------------------|----------------|
| DEPTH OF JOB <u>5711</u> | |
| PUMP TRUCK CHARGE | <u>3099.25</u> |
| EXTRA FOOTAGE @ | |
| MILEAGE <u>40 mi @ 7.70</u> | <u>308.00</u> |
| MANIFOLD <u>L Head</u> @ | <u>275</u> |
| <u>LV 40 mi @ 4.40</u> | <u>176.00</u> |
| | |
| TOTAL | <u>3858.25</u> |

CHARGE TO: Sandridge
STREET _____
CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

| | |
|----------------------------|--------------|
| <u>7"</u> Rubber Plug @ | <u>99.45</u> |
| @ | |
| @ | |
| @ | |
| @ | |
| TOTAL | <u>99.45</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 _____
SIGNATURE _____

SALES TAX (If Any) _____
TOTAL CHARGES 15994.03
DISCOUNT _____ IF PAID IN 30 DAYS
Net \$11855.92

Sandridge

Location Kansas
Field Sec 14--35S - 8W
Installation Harper County
Well **LIT-Trust 3508 5-14H**

Installation Data

Name Harper County
Latitude N36 59 52.81
Longitude W98 9 50.87
Coordinate System Kansas State Planes, Southern Zone

Slot Data

| Name | North [ft] | East [ft] | Northing | Easting |
|----------------------|------------|-----------|-----------|------------|
| LIT Trust 3508 5-14H | 3155.81 N | 3965.76 E | 123979.00 | 2102062.00 |

Elevation Data

| Slot - Mean Sea Level [ft] | Slot - Mudline/Ground level [ft] |
|----------------------------|----------------------------------|
| 0.00 | 0.00 |

Target Line: 11-18-13
Target: 4798 KBTVD @ 0 VS
88.35 @ 167.63 Azimuth Plane

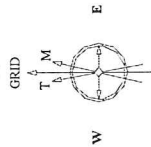
WELL PROFILE DATA

| Point | MD | Inc | Azi | TVD | North | East | deg/100ft | V. Sect |
|-------------------------|---------|-------|--------|---------|----------|--------|-----------|---------|
| Tie on KOP | 3620.00 | -0.00 | 0.00 | 3620.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Build | 4064.20 | 35.54 | 88.78 | 4036.26 | 2.84 | 133.36 | 8.00 | 25.80 |
| End of Hold | 4291.44 | 35.54 | 88.78 | 4221.18 | 5.65 | 265.41 | 0.00 | 51.35 |
| Target LIT Trust 3508 | 5404.96 | 86.00 | 180.00 | 4819.32 | -690.00 | 674.96 | 8.00 | 818.60 |
| Target LIT Trust 3508 | 5704.96 | 88.00 | 180.00 | 4829.79 | -989.81 | 674.96 | 0.00 | 1111.45 |
| Target LIT Trust 3508 | 5709.30 | 88.35 | 180.00 | 4829.93 | -994.20 | 674.96 | 8.00 | 1115.73 |
| T.D. & Target LIT Trust | 7792.79 | 88.35 | 180.00 | 4890.00 | -3076.83 | 674.96 | 0.00 | 3149.99 |

TARGET DATA

| MD | Inc | Azi | TVD | North | East | Name | Position |
|---------|-------|--------|---------|----------|--------|--------------------------------|-----------------------------------|
| 5404.96 | 88.00 | 180.00 | 4819.32 | -690.00 | 674.96 | LIT Trust 3508 5-14H - 88° | 2102737.00 East : 123288.96 North |
| 5704.96 | 88.00 | 180.00 | 4829.79 | -989.81 | 674.96 | LIT Trust 3508 5-14H - End 88° | 2102737.00 East : 122989.13 North |
| 5709.30 | 88.35 | 180.00 | 4829.93 | -994.20 | 674.96 | LIT Trust 3508 5-14H - LP | 2102737.00 East : 122984.74 North |
| 7792.79 | 88.35 | 180.00 | 4890.00 | -3076.83 | 674.96 | LIT Trust 3508 5-14H - BHL | 2102737.00 East : 120901.99 North |

Created by admin
Date plotted 5-Dec-2013
Plot reference is LIT Trust 3508 5-14H (Plan 11-18).
Ref wellpath is LIT Trust 3508 5-14H (PWPPI).
Coordinates are in feet reference LIT Trust 3508 5-14H.
True Vertical Depths are reference LIT Trust 3508 5-14H.
Measured Depths are reference Slot.
Plot North is aligned to GRID North.



16-Feb-2012
ICRP Model [1900.0-2015.0] Dip: 66.60 deg; Field: 5271.8 nT
Magnetic North is 4.38 deg East of True North
GRID North is 0.21 deg East of True North
To correct azimuth from True to GRID subtract 0.21 deg
To correct azimuth from Magnetic to GRID add 4.18 deg

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

SandRidge
ENERGY

Surface Location:
200 FNL 1320 FEL
X = 2102062 Y = 123979

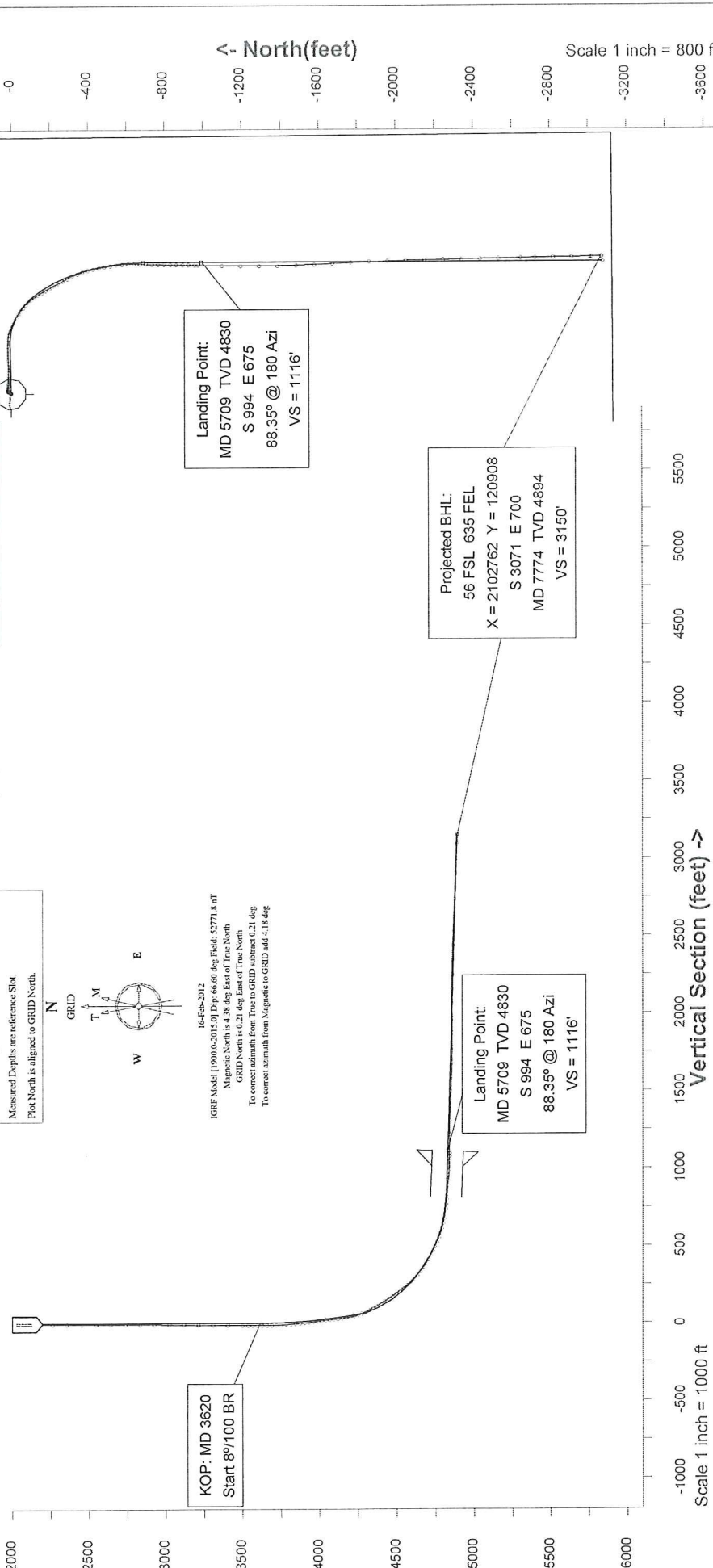
Landing Point:
MD 5709 TVD 4830
S 994 E 675
88.35° @ 180 Azi
VS = 1116'

Projected BHL:
56 FSL 635 FEL
X = 2102762 Y = 120908
S 3071 E 700
MD 7774 TVD 4894
VS = 3150'

Landing Point:
MD 5709 TVD 4830
S 994 E 675
88.35° @ 180 Azi
VS = 1116'

True Vertical Depth (feet)

Scale 1 inch = 1000 ft



Vertical Section (feet) ->
Azimuth 167.63 with reference 0.00 N, 0.00 E from LIT Trust 3508 5-14H

Scale 1 inch = 800 ft

North (feet)

Company: Sandridge
Well Name: LIT Trust 3508 5-14H
Legals: Sec: 14 Township: 35S
 Range: 8W
County/State: Harper County KS
Rig Name: Lariat 20

Customer Rep **Position**

Directional Driller

MWD Operator

Mike Foster
Scott Graham

George Hunt

LIT Trust 3508 5-14H Surveys

| Type | M Depth | Incl. | Azimuth | TVD | North | East | V Section | Dogleg | B Rate | T Rate | Clos Azi | Clos Dist |
|------------|---------|-------|---------|---------|-------|-------|-----------|--------|--------|--------|----------|-----------|
| TieInPoint | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Survey | 862.00 | 0.40 | 73.40 | 861.99 | 0.86 | 2.88 | -0.22 | 0.05 | 0.05 | 8.52 | 73.37 | 3.01 |
| Survey | 953.00 | 0.20 | 82.90 | 952.99 | 0.97 | 3.34 | -0.23 | 0.23 | 0.22 | 10.44 | 73.81 | 3.48 |
| Survey | 1043.00 | 0.20 | 37.60 | 1042.99 | 1.11 | 3.59 | -0.32 | 0.17 | 0.00 | 50.33 | 72.82 | 3.76 |
| Survey | 1133.00 | 0.20 | 66.40 | 1132.99 | 1.30 | 3.83 | -0.45 | 0.11 | 0.00 | 32.00 | 71.25 | 4.04 |
| Survey | 1224.00 | 0.30 | 78.70 | 1223.99 | 1.41 | 4.21 | -0.48 | 0.12 | 0.11 | 13.52 | 71.48 | 4.44 |
| Survey | 1315.00 | 0.20 | 56.00 | 1314.99 | 1.55 | 4.58 | -0.53 | 0.15 | 0.11 | 24.95 | 71.30 | 4.84 |
| Survey | 1404.00 | 0.50 | 42.10 | 1403.99 | 1.92 | 4.97 | -0.81 | 0.35 | 0.34 | 15.62 | 68.88 | 5.33 |
| Survey | 1500.00 | 0.40 | 33.10 | 1499.99 | 2.52 | 5.43 | -1.30 | 0.13 | 0.10 | 9.37 | 65.10 | 5.99 |
| Survey | 1595.00 | 0.40 | 21.70 | 1594.98 | 3.10 | 5.74 | -1.80 | 0.08 | 0.00 | 12.00 | 61.63 | 6.52 |
| Survey | 1690.00 | 0.50 | 37.80 | 1689.98 | 3.74 | 6.11 | -2.34 | 0.17 | 0.11 | 16.95 | 58.53 | 7.16 |
| Survey | 1785.00 | 0.50 | 37.50 | 1784.98 | 4.39 | 6.62 | -2.87 | 0.00 | 0.00 | 0.32 | 56.45 | 7.94 |
| Survey | 1881.00 | 0.40 | 46.90 | 1880.97 | 4.96 | 7.12 | -3.32 | 0.13 | 0.10 | 9.79 | 55.14 | 8.68 |
| Survey | 1976.00 | 0.50 | 57.60 | 1975.97 | 5.40 | 7.71 | -3.62 | 0.14 | 0.11 | 11.26 | 54.99 | 9.41 |
| Survey | 2071.00 | 0.40 | 41.20 | 2070.97 | 5.88 | 8.28 | -3.97 | 0.17 | 0.11 | 17.26 | 54.62 | 10.16 |
| Survey | 2166.00 | 0.20 | 13.50 | 2165.97 | 6.29 | 8.54 | -4.31 | 0.25 | 0.21 | 29.16 | 53.63 | 10.61 |
| Survey | 2261.00 | 0.30 | 34.60 | 2260.97 | 6.65 | 8.72 | -4.63 | 0.14 | 0.11 | 22.21 | 52.67 | 10.97 |
| Survey | 2356.00 | 0.50 | 41.70 | 2355.96 | 7.17 | 9.13 | -5.05 | 0.22 | 0.21 | 7.47 | 51.86 | 11.61 |
| Survey | 2452.00 | 0.20 | 51.30 | 2451.96 | 7.59 | 9.54 | -5.37 | 0.32 | 0.31 | 10.00 | 51.49 | 12.19 |
| Survey | 2547.00 | 0.10 | 20.70 | 2546.96 | 7.77 | 9.70 | -5.51 | 0.13 | 0.11 | 32.21 | 51.30 | 12.43 |
| Survey | 2642.00 | 0.40 | 12.20 | 2641.96 | 8.17 | 9.80 | -5.88 | 0.32 | 0.32 | 8.95 | 50.18 | 12.76 |
| Survey | 2737.00 | 0.20 | 9.10 | 2736.96 | 8.66 | 9.89 | -6.34 | 0.21 | 0.21 | 3.26 | 48.79 | 13.15 |
| Survey | 2833.00 | 0.40 | 5.50 | 2832.96 | 9.16 | 9.95 | -6.82 | 0.21 | 0.21 | 3.75 | 47.37 | 13.52 |
| Survey | 2928.00 | 0.50 | 339.30 | 2927.96 | 9.88 | 9.84 | -7.54 | 0.24 | 0.11 | 27.58 | 44.88 | 13.94 |
| Survey | 3023.00 | 0.50 | 7.80 | 3022.95 | 10.67 | 9.75 | -8.33 | 0.26 | 0.00 | 30.00 | 42.42 | 14.45 |
| Survey | 3118.00 | 0.50 | 345.40 | 3117.95 | 11.49 | 9.70 | -9.15 | 0.20 | 0.00 | 23.58 | 40.17 | 15.04 |
| Survey | 3213.00 | 0.70 | 2.00 | 3212.94 | 12.47 | 9.61 | -10.12 | 0.28 | 0.21 | 17.47 | 37.62 | 15.74 |
| Survey | 3308.00 | 0.40 | 12.80 | 3307.94 | 13.37 | 9.71 | -10.98 | 0.33 | 0.32 | 11.37 | 35.99 | 16.52 |
| Survey | 3404.00 | 0.50 | 9.00 | 3403.94 | 14.11 | 9.85 | -11.67 | 0.11 | 0.10 | 3.96 | 34.92 | 17.21 |
| Survey | 3499.00 | 0.60 | 355.10 | 3498.93 | 15.02 | 9.87 | -12.56 | 0.17 | 0.11 | 14.63 | 33.31 | 17.97 |
| Survey | 3535.00 | 0.50 | 351.30 | 3534.93 | 15.36 | 9.83 | -12.90 | 0.30 | 0.28 | 10.56 | 32.62 | 18.24 |
| Survey | 3564.00 | 0.80 | 28.30 | 3563.93 | 15.66 | 9.91 | -13.17 | 1.73 | 1.03 | 127.59 | 32.33 | 18.53 |
| Survey | 3595.00 | 2.20 | 61.30 | 3594.92 | 16.14 | 10.53 | -13.51 | 5.13 | 4.52 | 106.45 | 33.12 | 19.27 |
| Survey | 3627.00 | 4.30 | 84.10 | 3626.87 | 16.56 | 12.26 | -13.55 | 7.58 | 6.56 | 71.25 | 36.51 | 20.60 |
| Survey | 3658.00 | 6.50 | 85.50 | 3657.73 | 16.81 | 15.17 | -13.17 | 7.11 | 7.10 | 4.52 | 42.06 | 22.64 |
| Survey | 3690.00 | 8.90 | 84.40 | 3689.44 | 17.20 | 19.44 | -12.64 | 7.51 | 7.50 | 3.44 | 48.50 | 25.96 |
| Survey | 3722.00 | 11.00 | 85.80 | 3720.95 | 17.66 | 24.95 | -11.91 | 6.61 | 6.56 | 4.38 | 54.71 | 30.57 |
| Survey | 3753.00 | 12.90 | 90.40 | 3751.28 | 17.85 | 31.36 | -10.72 | 6.85 | 6.13 | 14.84 | 60.35 | 36.08 |
| Survey | 3785.00 | 15.00 | 93.60 | 3782.33 | 17.57 | 39.07 | -8.79 | 6.99 | 6.56 | 10.00 | 65.79 | 42.84 |
| Survey | 3817.00 | 17.30 | 95.40 | 3813.07 | 16.86 | 47.94 | -6.20 | 7.35 | 7.19 | 5.63 | 70.62 | 50.82 |
| Survey | 3849.00 | 18.30 | 94.50 | 3843.54 | 16.02 | 57.68 | -3.29 | 3.24 | 3.13 | 2.81 | 74.48 | 59.86 |
| Survey | 3881.00 | 19.70 | 93.00 | 3873.79 | 15.34 | 68.08 | -0.40 | 4.63 | 4.38 | 4.69 | 77.30 | 69.79 |

LIT Trust 3508 5-14H Surveys

| Type | M Depth | Incl. | Azimuth | TVD | North | East | V Section | Dogleg | B Rate | T Rate | Clos Azi | Clos Dist |
|--------|---------|-------|---------|---------|---------|--------|-----------|--------|--------|--------|----------|-----------|
| Survey | 3912.00 | 23.10 | 92.50 | 3902.65 | 14.80 | 79.37 | 2.55 | 10.98 | 10.97 | 1.61 | 79.44 | 80.74 |
| Survey | 3944.00 | 27.20 | 91.90 | 3931.61 | 14.29 | 92.96 | 5.96 | 12.84 | 12.81 | 1.88 | 81.26 | 94.05 |
| Survey | 3976.00 | 29.50 | 91.60 | 3959.77 | 13.83 | 108.15 | 9.66 | 7.20 | 7.19 | 0.94 | 82.71 | 109.03 |
| Survey | 4008.00 | 30.30 | 89.50 | 3987.51 | 13.68 | 124.10 | 13.22 | 4.12 | 2.50 | 6.56 | 83.71 | 124.85 |
| Survey | 4039.00 | 30.60 | 87.60 | 4014.24 | 14.07 | 139.80 | 16.21 | 3.25 | 0.97 | 6.13 | 84.25 | 140.51 |
| Survey | 4071.00 | 31.80 | 87.30 | 4041.61 | 14.81 | 156.36 | 19.03 | 3.78 | 3.75 | 0.94 | 84.59 | 157.06 |
| Survey | 4103.00 | 33.70 | 86.90 | 4068.52 | 15.69 | 173.65 | 21.87 | 5.98 | 5.94 | 1.25 | 84.84 | 174.36 |
| Survey | 4134.00 | 34.60 | 87.60 | 4094.18 | 16.52 | 191.03 | 24.79 | 3.17 | 2.90 | 2.26 | 85.06 | 191.74 |
| Survey | 4166.00 | 34.60 | 87.30 | 4120.52 | 17.33 | 209.18 | 27.88 | 0.53 | 0.00 | 0.94 | 85.26 | 209.90 |
| Survey | 4198.00 | 35.30 | 89.10 | 4146.75 | 17.91 | 227.50 | 31.24 | 3.89 | 2.19 | 5.63 | 85.50 | 228.20 |
| Survey | 4230.00 | 35.00 | 89.10 | 4172.91 | 18.19 | 245.92 | 34.91 | 0.94 | 0.94 | 0.00 | 85.77 | 246.59 |
| Survey | 4261.00 | 35.90 | 93.10 | 4198.17 | 17.84 | 263.89 | 39.11 | 8.03 | 2.90 | 12.90 | 86.13 | 264.49 |
| Survey | 4293.00 | 37.40 | 98.10 | 4223.85 | 15.97 | 282.89 | 45.00 | 10.44 | 4.69 | 15.63 | 86.77 | 283.34 |
| Survey | 4325.00 | 38.40 | 102.90 | 4249.10 | 12.38 | 302.20 | 52.65 | 9.73 | 3.12 | 15.00 | 87.65 | 302.45 |
| Survey | 4357.00 | 38.50 | 107.60 | 4274.17 | 7.15 | 321.39 | 61.87 | 9.14 | 0.31 | 14.69 | 88.73 | 321.47 |
| Survey | 4389.00 | 39.10 | 112.20 | 4299.11 | 0.32 | 340.23 | 72.57 | 9.20 | 1.87 | 14.38 | 89.95 | 340.23 |
| Survey | 4420.00 | 39.30 | 114.70 | 4323.14 | -7.48 | 358.20 | 84.04 | 5.14 | 0.65 | 8.06 | 91.20 | 358.28 |
| Survey | 4452.00 | 39.00 | 118.00 | 4347.96 | -16.44 | 376.30 | 96.67 | 6.58 | 0.94 | 10.31 | 92.50 | 376.66 |
| Survey | 4484.00 | 39.20 | 121.70 | 4372.79 | -26.48 | 393.79 | 110.22 | 7.32 | 0.63 | 11.56 | 93.85 | 394.68 |
| Survey | 4516.00 | 39.30 | 125.60 | 4397.57 | -37.69 | 410.64 | 124.78 | 7.72 | 0.31 | 12.19 | 95.24 | 412.37 |
| Survey | 4547.00 | 38.70 | 128.30 | 4421.67 | -49.42 | 426.23 | 139.58 | 5.81 | 1.94 | 8.71 | 96.61 | 429.09 |
| Survey | 4579.00 | 38.90 | 130.90 | 4446.61 | -62.20 | 441.67 | 155.37 | 5.13 | 0.62 | 8.12 | 98.02 | 446.03 |
| Survey | 4611.00 | 38.50 | 133.40 | 4471.58 | -75.62 | 456.50 | 171.66 | 5.04 | 1.25 | 7.81 | 99.41 | 462.72 |
| Survey | 4643.00 | 39.40 | 138.30 | 4496.48 | -90.05 | 470.50 | 188.75 | 10.03 | 2.81 | 15.31 | 100.83 | 479.04 |
| Survey | 4674.00 | 41.10 | 142.40 | 4520.14 | -105.47 | 483.26 | 206.55 | 10.15 | 5.48 | 13.23 | 102.31 | 494.64 |
| Survey | 4706.00 | 41.50 | 146.20 | 4544.19 | -122.62 | 495.58 | 225.94 | 7.94 | 1.25 | 11.88 | 103.90 | 510.52 |
| Survey | 4738.00 | 43.00 | 147.30 | 4567.87 | -140.61 | 507.38 | 246.04 | 5.23 | 4.69 | 3.44 | 105.49 | 526.50 |
| Survey | 4770.00 | 44.80 | 148.80 | 4590.93 | -159.44 | 519.11 | 266.94 | 6.50 | 5.63 | 4.69 | 107.07 | 543.04 |
| Survey | 4801.00 | 47.30 | 149.50 | 4612.44 | -178.60 | 530.55 | 288.11 | 8.23 | 8.06 | 2.26 | 108.60 | 559.80 |
| Survey | 4833.00 | 50.20 | 150.00 | 4633.54 | -199.38 | 542.67 | 311.00 | 9.14 | 9.06 | 1.56 | 110.17 | 578.14 |
| Survey | 4865.00 | 53.00 | 150.90 | 4653.42 | -221.20 | 555.03 | 334.97 | 9.02 | 8.75 | 2.81 | 111.73 | 597.48 |
| Survey | 4897.00 | 56.00 | 151.70 | 4672.00 | -244.05 | 567.54 | 359.96 | 9.59 | 9.38 | 2.50 | 113.27 | 617.79 |
| Survey | 4928.00 | 59.10 | 152.50 | 4688.63 | -267.16 | 579.77 | 385.16 | 10.23 | 10.00 | 2.58 | 114.74 | 638.36 |
| Survey | 4960.00 | 62.10 | 153.40 | 4704.34 | -291.99 | 592.44 | 412.13 | 9.69 | 9.38 | 2.81 | 116.24 | 660.49 |
| Survey | 4992.00 | 64.10 | 155.40 | 4718.82 | -317.72 | 604.77 | 439.90 | 8.37 | 6.25 | 6.25 | 117.72 | 683.15 |
| Survey | 5024.00 | 64.50 | 158.50 | 4732.70 | -344.25 | 616.06 | 468.23 | 8.82 | 1.25 | 9.69 | 119.20 | 705.72 |
| Survey | 5055.00 | 65.10 | 162.00 | 4745.90 | -370.65 | 625.53 | 496.05 | 10.40 | 1.94 | 11.29 | 120.65 | 727.10 |
| Survey | 5087.00 | 66.30 | 165.10 | 4759.07 | -398.61 | 633.78 | 525.13 | 9.59 | 3.75 | 9.69 | 122.17 | 748.71 |
| Survey | 5119.00 | 67.50 | 167.70 | 4771.63 | -427.22 | 640.70 | 554.56 | 8.36 | 3.75 | 8.12 | 123.70 | 770.07 |
| Survey | 5151.00 | 70.60 | 168.60 | 4783.07 | -456.46 | 646.83 | 584.43 | 10.04 | 9.69 | 2.81 | 125.21 | 791.67 |
| Survey | 5182.00 | 74.50 | 169.50 | 4792.36 | -485.49 | 652.44 | 613.99 | 12.88 | 12.58 | 2.90 | 126.65 | 813.25 |
| Survey | 5214.00 | 78.40 | 170.80 | 4799.86 | -516.13 | 657.76 | 645.06 | 12.81 | 12.19 | 4.06 | 128.12 | 836.09 |
| Survey | 5246.00 | 80.60 | 173.10 | 4805.69 | -547.28 | 662.16 | 676.43 | 9.86 | 6.87 | 7.19 | 129.57 | 859.05 |
| Survey | 5278.00 | 82.10 | 175.30 | 4810.51 | -578.75 | 665.36 | 707.85 | 8.26 | 4.69 | 6.88 | 131.02 | 881.85 |
| Survey | 5310.00 | 82.40 | 178.00 | 4814.82 | -610.40 | 667.21 | 739.16 | 8.41 | 0.94 | 8.44 | 132.45 | 904.30 |
| Survey | 5341.00 | 83.90 | 180.30 | 4818.52 | -641.17 | 667.67 | 769.32 | 8.81 | 4.84 | 7.42 | 133.84 | 925.68 |
| Survey | 5373.00 | 85.00 | 182.10 | 4821.61 | -673.02 | 667.00 | 800.28 | 6.57 | 3.44 | 5.62 | 135.26 | 947.55 |
| Survey | 5405.00 | 85.10 | 181.80 | 4824.38 | -704.88 | 665.91 | 831.17 | 0.98 | 0.31 | 0.94 | 136.63 | 969.69 |

LIT Trust 3508 5-14H Surveys

| Type | M Depth | Incl. | Azimuth | TVD | North | East | V Section | Dogleg | B Rate | T Rate | Clos Azi | Clos Dist |
|------------|---------|-------|---------|---------|----------|--------|-----------|--------|--------|--------|----------|-----------|
| Survey | 5437.00 | 85.50 | 181.70 | 4827.00 | -736.76 | 664.94 | 862.10 | 1.29 | 1.25 | 0.31 | 137.93 | 992.45 |
| Survey | 5469.00 | 85.50 | 181.40 | 4829.51 | -768.65 | 664.08 | 893.07 | 0.93 | 0.00 | 0.94 | 139.17 | 1015.79 |
| Survey | 5500.00 | 85.40 | 181.40 | 4831.97 | -799.54 | 663.32 | 923.08 | 0.32 | 0.32 | 0.00 | 140.32 | 1038.87 |
| Survey | 5532.00 | 85.10 | 181.20 | 4834.62 | -831.42 | 662.60 | 954.06 | 1.13 | 0.94 | 0.63 | 141.45 | 1063.15 |
| Survey | 5564.00 | 85.80 | 180.70 | 4837.16 | -863.31 | 662.07 | 985.10 | 2.69 | 2.19 | 1.56 | 142.52 | 1087.95 |
| Survey | 5596.00 | 88.20 | 181.20 | 4838.83 | -895.26 | 661.54 | 1016.19 | 7.66 | 7.50 | 1.56 | 143.54 | 1113.16 |
| Survey | 5627.00 | 88.30 | 181.00 | 4839.78 | -926.24 | 660.95 | 1046.33 | 0.72 | 0.32 | 0.65 | 144.49 | 1137.88 |
| Survey | 5659.00 | 88.50 | 181.10 | 4840.67 | -958.22 | 660.36 | 1077.44 | 0.70 | 0.63 | 0.31 | 145.43 | 1163.73 |
| Survey | 5677.00 | 88.80 | 181.30 | 4841.10 | -976.21 | 659.99 | 1094.93 | 2.00 | 1.67 | 1.11 | 145.94 | 1178.38 |
| Survey | 5801.00 | 90.50 | 181.80 | 4841.86 | -1100.16 | 656.64 | 1215.29 | 1.43 | 1.37 | 0.40 | 149.17 | 1281.22 |
| Survey | 5897.00 | 88.60 | 180.30 | 4842.61 | -1196.13 | 654.88 | 1308.65 | 2.52 | 1.98 | 1.56 | 151.30 | 1363.67 |
| Survey | 5993.00 | 86.90 | 180.50 | 4846.38 | -1292.05 | 654.21 | 1402.20 | 1.78 | 1.77 | 0.21 | 153.15 | 1448.23 |
| Survey | 6088.00 | 87.90 | 178.70 | 4850.69 | -1386.94 | 654.87 | 1495.03 | 2.17 | 1.05 | 1.89 | 154.72 | 1533.77 |
| Survey | 6184.00 | 88.30 | 178.00 | 4853.87 | -1482.85 | 657.63 | 1589.31 | 0.84 | 0.42 | 0.73 | 156.08 | 1622.13 |
| Survey | 6279.00 | 88.30 | 177.60 | 4856.69 | -1577.73 | 661.28 | 1682.76 | 0.42 | 0.00 | 0.42 | 157.26 | 1710.71 |
| Survey | 6375.00 | 89.50 | 176.20 | 4858.53 | -1673.57 | 666.47 | 1777.49 | 1.92 | 1.25 | 1.46 | 158.29 | 1801.39 |
| Survey | 6471.00 | 90.00 | 177.40 | 4858.95 | -1769.42 | 671.83 | 1872.26 | 1.35 | 0.52 | 1.25 | 159.21 | 1892.67 |
| Survey | 6566.00 | 90.80 | 178.20 | 4858.29 | -1864.35 | 675.48 | 1965.77 | 1.19 | 0.84 | 0.84 | 160.08 | 1982.95 |
| Survey | 6662.00 | 90.90 | 178.30 | 4856.87 | -1960.29 | 678.41 | 2060.11 | 0.15 | 0.10 | 0.10 | 160.91 | 2074.36 |
| Survey | 6757.00 | 89.80 | 178.40 | 4856.29 | -2055.25 | 681.15 | 2153.46 | 1.16 | 1.16 | 0.11 | 161.66 | 2165.18 |
| Survey | 6853.00 | 88.80 | 178.80 | 4857.46 | -2151.21 | 683.50 | 2247.69 | 1.12 | 1.04 | 0.42 | 162.37 | 2257.18 |
| Survey | 6948.00 | 87.70 | 179.10 | 4860.36 | -2246.15 | 685.24 | 2340.80 | 1.20 | 1.16 | 0.32 | 163.03 | 2348.35 |
| Survey | 7044.00 | 87.50 | 179.30 | 4864.38 | -2342.06 | 686.58 | 2434.77 | 0.29 | 0.21 | 0.21 | 163.66 | 2440.62 |
| Survey | 7139.00 | 87.90 | 178.90 | 4868.19 | -2436.97 | 688.07 | 2527.80 | 0.60 | 0.42 | 0.42 | 164.23 | 2532.24 |
| Survey | 7235.00 | 88.50 | 178.50 | 4871.21 | -2532.90 | 690.25 | 2621.97 | 0.75 | 0.62 | 0.42 | 164.76 | 2625.27 |
| Survey | 7351.00 | 87.80 | 178.90 | 4874.95 | -2648.81 | 692.88 | 2735.75 | 0.69 | 0.60 | 0.34 | 165.34 | 2737.93 |
| Survey | 7426.00 | 87.50 | 179.00 | 4878.03 | -2723.73 | 694.25 | 2809.22 | 0.42 | 0.40 | 0.13 | 165.70 | 2810.82 |
| Survey | 7522.00 | 86.90 | 179.20 | 4882.72 | -2819.60 | 695.76 | 2903.19 | 0.66 | 0.62 | 0.21 | 166.14 | 2904.17 |
| Survey | 7618.00 | 88.00 | 179.30 | 4886.99 | -2915.50 | 697.02 | 2997.13 | 1.15 | 1.15 | 0.10 | 166.55 | 2997.66 |
| Survey | 7713.00 | 87.20 | 178.80 | 4890.97 | -3010.40 | 698.59 | 3090.17 | 0.99 | 0.84 | 0.53 | 166.94 | 3090.39 |
| Survey | 7724.00 | 86.80 | 178.70 | 4891.54 | -3021.38 | 698.83 | 3100.94 | 3.75 | 3.64 | 0.91 | 166.98 | 3101.15 |
| PrjCalcPnt | 7774 | 86.8 | 178.7 | 4894.33 | -3071.29 | 699.96 | 3149.94 | 0 | 0 | 0 | 167.16 | 3150.04 |