Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1085205

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 # | API No. 15 |
|---|--|
| Name: | Spot Description: |
| Address 1: | |
| Address 2: | Feet from Dorth / South Line of Section |
| City: State: Zip:+ | Feet from East / West Line of Section |
| Contact Person: | Footages Calculated from Nearest Outside Section Corner: |
| Phone: () | |
| CONTRACTOR: License # | GPS Location: Lat:, Long: |
| Name: | (e.g. xx.xxxxx) (e.gxxx.xxxxx) |
| Wellsite Geologist: | Datum: NAD27 NAD83 WGS84 |
| Purchaser: | County: |
| Designate Type of Completion: | Lease Name: Well #: |
| New Well Re-Entry Workover | Field Name: |
| | Producing Formation: |
| Gas D&A ENHR SIGW | Elevation: Ground: Kelly Bushing: |
| | Total Vertical Depth: Plug Back Total Depth: |
| CM (Coal Bed Methane) | Amount of Surface Pipe Set and Cemented at: Feet |
| Cathodic Other (Core, Expl., etc.): | Multiple Stage Cementing Collar Used? Yes No |
| If Workover/Re-entry: Old Well Info as follows: | If yes, show depth set: Feet |
| Operator: | If Alternate II completion, cement circulated from: |
| Well Name: | feet depth to:w/sx cmt. |
| Original Comp. Date: Original Total Depth: | |
| Deepening Re-perf. Conv. to ENHR Conv. to SWD | Drilling Fluid Management Plan |
| Plug Back Conv. to GSW Conv. to Producer | (Data must be collected from the Reserve Pit) |
| | Chloride content: ppm Fluid volume: bbls |
| Commingled Permit #: | Dewatering method used: |
| Dual Completion Permit #: SWD Permit #: | Leastion of fluid diapopal if bould affeita: |
| ENHR Permit #: | Location of fluid disposal if hauled offsite: |
| GSW Permit #: | Operator Name: |
| | Lease Name: License #: |
| Spud Date or Date Reached TD Completion Date or | Quarter Sec TwpS. R East West |
| Recompletion Date Recompletion Date | 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: |
| |

| | Page Two | 1085205 |
|---|----------------------------------|--|
| Operator Name: | _ Lease Name: | Well #: |
| Sec TwpS. R East West | County: | |
| INCTRUCTIONS. Chain important tang of formations panetrated | stail all aaroo Danart all final | conice of drill stome tests giving interval tested time test |

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 (Attach Additional Sheets) | | Yes No | | - | on (Top), Depth a | | Sample |
|--|----------------------|------------------------------|----------------------|------------------|-------------------|-----------------|-------------------------------|
| Samples Sent to Geolog | gical Survey | Yes No | Name | 9 | | Тор | Datum |
| Cores Taken Electric Log Run | | ☐ Yes ☐ No ☐ Yes ☐ No | | | | | |
| List All E. Logs Run: | | | | | | | |
| | | | RECORD Ne | | ion, 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 / SQU | EEZE RECORD | | | |
| Purpose: | Depth | T (0) | | | | - | |

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

No

| Did you perform a hydraulic fracturing treatment on this well? | Yes |
|---|-----|
| Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? | Yes |
| Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? | Yes |

| No | (If No, skip questions 2 and 3) |
|----|---------------------------------|
| No | (If No, skip question 3) |

(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: | Siz | ze: | Set At: | | Packer | At: | Liner R | un: | No | |
| Date of First, Resumed | Producti | on, SWD or ENHF | l. | Producing Met | hod: | bing | Gas Lift | Other (Explain) | | |
| Estimated Production Per 24 Hours | n Oil Bbls. | | Gas Mcf Wate | | Wate | er | Bbls. | Gas-Oil Ratio | Gravity | |
| DISPOSITI | | 246. | | 1 | | | | | PRODUCTION IN | |
| | | | METHOD OF COMPLE | | | / Comp. Commingled | | | | |
| (If vented, Su | | | | | (Submit AC | | | (Submit ACO-4) | | |



DRILL STEM TEST REPORT

Prepared For: TDI, Inc.

1310 Bison Road Hays, KS 67601

ATTN: Herb Deines

Stackhouse #1

18-12s-18w Ellis,KS

 Start Date:
 2012.05.31 @ 15:52:24

 End Date:
 2012.05.31 @ 22:05:39

 Job Ticket #:
 47803
 DST #: 1

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620 TDI, Inc.

| | DRILL STEM TES | ST REP | ORT | | | | |
|--|--|---|--|---|---|---|--|
| | TDI, Inc. | | 18-12 | 18-12s-18w Ellis,KS | | | |
| ESTING , INC | 1310 Bison Road Hays, KS 67601 | | | Stackhouse #1 Job Ticket: 47803 DST#:1 | | | |
| | ATTN: Herb Deines | | | | 2.05.31 @ 15:52 | | |
| GENERAL INFORMATION:Formation:C-FDeviated:NoWhipstock:Time Tool Opened:17:37:09Time Test Ended:22:05:39 | 0.00 ft (KB) | | Test T Tester Unit N | r: Jas | nventional Botto son McLemore | m Hole (Initial) | |
| Interval:3540.00 ft (KB) To36Total Depth:3611.00 ft (KB) (ThHole Diameter:7.88 inches Hole | | | Refere | ence Eleva KB to G | 222 | 29.00 ft (KB) 22.00 ft (CF) 7.00 ft | |
| Serial #: 8366 Inside Press@RunDepth: 121.80 psig Start Date: 2012.05.31 Start Time: 15:52:26 TEST COMMENT: IFP-Slid 10' Plugg ISI-Dead FFP-Weak Blow , FEI-Dead FFP-Weak Blow , | End Date: End Time: ging Action, Built to 2 1/2" | 2012.05.31 22:05:39 | Capacity: Last Calib.: Time On Bti Time Off Bt | m: 201 | 800 2012.0 12.05.31 @ 17:3 12.05.31 @ 20:4 | 6:39 | |
| FSI-Dead Pressure vs. T | Time | Time | Pressure | Temp | SUMMARY Annotation | | |
| | | (Min.) 0 1 47 90 90 136 189 191 | 1764.03 41.87 81.65 945.42 82.96 121.80 927.74 | 102.85 O 104.77 S 106.39 E 105.78 O 107.57 S 108.62 E | itial Hydro-static pen To Flow (1) hut-ln(1) nd Shut-ln(1) pen To Flow (2) hut-ln(2) nd Shut-ln(2) inal Hydro-static | | |
| 31 Thu May 2012 EPM Time (Hours) | 9PM | | | | | | |
| Recovery | | | I | Gas F | | | |
| Length (ft) Description Length (ft) Description 187.00 Drilling Mud | Volume (bbl) 2.62 | | | Choke (inche | es) Pressure (psig) | Gas Rate (Mcf/d) | |
| Trilobite Testing, Inc | Ref. No: 47803 | | | | 12.06.04 @ 15: | | |

| | DRILL STEM TE | ST REP | ORT | | | |
|--|---|------------------------|--|---------------------------------|---------------------|--------------------------------|
| RILOBITE | TDI, Inc. | | 18-12s-18 | w Ellis,KS | | |
| ESTING , II | C. 1310 Bison Road Hays, KS 67601 | | Stackhou | | | |
| | | | Job Ticket: | | DST# | :1 |
| | ATTN: Herb Deines | | Test Start: | 2012.05.31 @ | 2 15:52:24 | |
| GENERAL INFORMATION: | | | | | | |
| Formation:C-FDeviated:NoWhipstoclTime Tool Opened:17:37:09Time Test Ended:22:05:39 | : 0.00 ft (KB) | | Test Type: Tester: Unit No: | Conventiona Jason McLe 54 | | lole (Initial) |
| Total Depth: 3611.00 ft (KB) | 3611.00 ft (KB) (TVD) (TVD) lole Condition: Good | | Reference I | Elevations: 3 to GR/CF: | 2222.0 | 0 ft (KB) 0 ft (CF) 0 ft |
| Serial #: 8289OutsidePress@RunDepth:psStart Date:2012.05.3Start Time:15:52:1 | | 2012.05.31 22:05:54 | Capacity: Last Calib.: Time On Btm: Time Off Btm: | | 8000.0 2012.05.3 | 0 psig 1 |
| FSI-Dead Pressure | w , Built to 3 1/4" s. Time | | PRESSI | JRE SUMM | ARY | |
| 8289 Pressure | 8289 Temperature | Time | Pressure Temp | | | |
| 1700 1200 | | (Min.) | (psig) (deg F | | | |
| Recove | У | | G | as Rates | | |
| Length (ft) Description | Volume (bbl) | | Choke | e (inches) Pressu | ure (psig) | Gas Rate (Mcf/d) |
| 187.00 Drilling Mud | 2.62 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Trilobite Testing, Inc | Ref. No: 47803 | | | d: 2012.06.04 | 0 45 05 | |

| | | | DRI | TOOL DIAGRAM | | | | |
|---|-------------|--------------|-----------|--------------|----------------|------------|--------------------------|----------------------|
| | RILOBITE | | TDI, Inc. | | | | 18-12s-18w Ellis,KS | |
| | ESTING | , INC. | 1310 Bi | ison Road | | | Stackhouse #1 | |
| | | | Hays, K | (S 67601 | | | Job Ticket: 47803 | DST#:1 |
| | | | ATTN: | Herb Deine | S | | Test Start: 2012.05.31 @ | 2 15:52:24 |
| Tool Information | | | | | | | | |
| Drill Pipe: Le | ength: 3549 | 9.00 ft | Diameter: | 3.80 | inches Volume: | 49.78 bb | Tool Weight: | 2000.00 lb |
| Heavy Wt. Pipe: Le | ength: C |).00 ft | Diameter: | 2.70 | inches Volume: | 0.00 bb | Weight set on Packer: | 25000.00 lb |
| Drill Collar: Le | ength: C |).00 ft | Diameter: | 2.25 | inches Volume: | 0.00 bb | Weight to Pull Loose: | 60000.00 lb |
| | | 000 | | | Total Volume: | 49.78 bb | Tool Chased | 10.00 ft |
| Drill Pipe Above KB: | | 0.00 ft | | | | | String Weight: Initial | 35000.00 lb |
| Depth to Top Packer | |).00 ft | | | | | Final | 35000.00 lb |
| Depth to Bottom Pac Interval betw een Pa | | ft .00 ft | | | | | | |
| Tool Length: | | 2.00 ft | | | | | | |
| Number of Packers: | - | 2 | Diameter: | 6 75 | inches | | | |
| Tool Comments: | | 2 | Diameter. | 0.75 | linenes | | | |
| Tool Description | | Ler | ngth (ft) | Serial No | . Position | Depth (ft) | Accum. Lengths | |
| Change Over Sub | | | 1.00 | | | 3520.00 | | |
| Shut In Tool | | | 5.00 | | | 3525.00 | | |
| Hydraulic tool | | | 5.00 | | | 3530.00 | | |
| Packer | | | 5.00 | | | 3535.00 | 21.00 | Bottom Of Top Packer |
| Packer | | | 5.00 | | | 3540.00 | | |
| Stubb | | | 1.00 | | | 3541.00 | | |
| Perforations | | | 3.00 | | | 3544.00 | | |
| Change Over Sub | | | 1.00 | | | 3545.00 | | |
| Blank Spacing | | | 62.00 | | | 3607.00 | | |
| Change Over Sub | | | 1.00 | | | 3608.00 | | |
| Recorder | | | 0.00 | 8366 | Inside | 3608.00 | | |
| | | | | | | | | |

Total Tool Length: 92.00

0.00

3.00

8289

Outside

3608.00

3611.00

71.00

Recorder

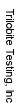
Bullnose

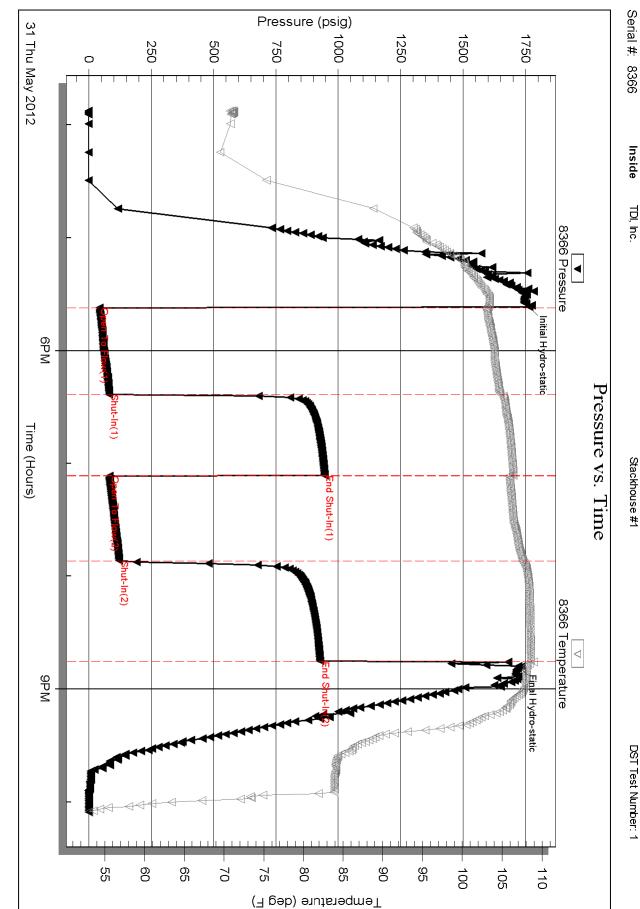
Bottom Packers & Anchor

| | | | DRI | | TEMTEST | | г | | | |
|---------------------------|------------------------------------|------------------------|--------------|---------------------|------------------------------------|-----------|---------------------------|-----------------|--------|---------|
| | RILOBITI | E | TDL 1 | | | | | w Ellis,KS | FLUIDS | UMMARY |
| TESTING , INC | | | | | | | | | | |
| | 1-0 | ., | | ison Roa KS 6760 | | | Stackhou Job Ticket: 4 | | DST#:1 | |
| | | | ATTN: | Herb De | eines | | | 2012.05.31 @ 1 | | |
| Mud and Cu | Ishion Inform | nation | | | | | | | | |
| Mud Type: G | | | | | Cushion Type: | | | Oil A PI: | | deg API |
| Mud Weight: | 9.00 lb/ga | | | | Cushion Length: Cushion Volume: | | ft | Water Salinity: | | ppm |
| Viscosity: Water Loss: | 49.00 sec/ 6.79 in ³ | /qt | | | Gas Cushion Type: | | bbl | | | |
| Resistivity: | ohm | ı.m | | | Gas Cushion Pressur | e: | psig | | | |
| Salinity: Filter Cake: | 1800.00 ppm inch | | | | | | | | | |
| Recovery In | - | | | | | | | | | |
| | | | | | Recovery Table | | | | | |
| | | Lengt ft | h | | Description | | Volume bbl | | | |
| | | | 187.00 | Drilling | Mud | | 2.623 | 3 | | |
| | Total L | _ength: | 187 | .00 ft | Total Volume: | 2.623 bbl | | | | |
| | | luid Samp | | | Num Gas Bombs: | 0 | Serial # | : | | |
| | | atory Nam very Comn | | | Laboratory Location | on: | | | | |
| | 10001 | | ionito. | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Printed: 2012.06.04 @ 15:37:29

Ref. No: 47803



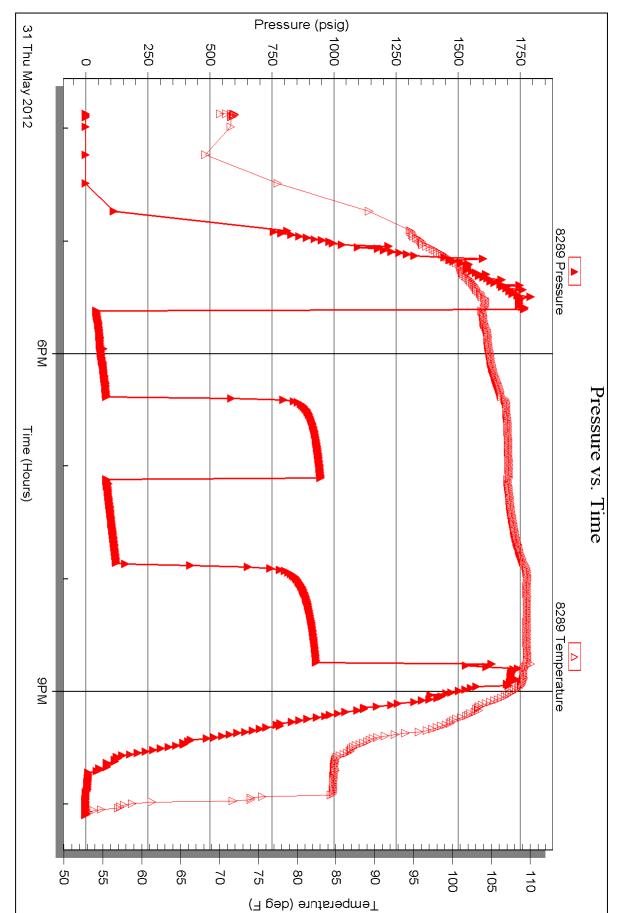


Stackhouse #1

Printed: 2012.06.04 @ 15:37:30

Ref. No: 47803

Trilobite Testing, Inc



Outside TDI, Inc.

Serial #: 8289

Stackhouse #1

DST Test Number: 1

| | 1030 | Ficket | |
|--|--|---|--|
| | NO. 47 | 7803 | |
| Elevation 2^{2} $(\mathcal{E}(\mathcal{E}))$ \mathbb{C} \mathbb | 2.3.9 (| KB 222 $\frac{4}{1}$ State KS $\frac{\sqrt{9}}{6.8}$ | 2GL |
| %gas | %oil | %water | %mud |
| %gas | %oil | %water | %mud |
| %gas | %oil | %water | %mud |
| %gas | %oil | %water | %mud |
| %gas | %oil | %water | %mud |
| ct 34.10 | T-On Loca T-Started T-Open | tion <u>14:33</u> <u>15:50</u> <u>17:37</u> <u>20:37</u> <u>22:07</u> <u>5</u> d Shale Packer d Packer d Packer 0 84.10 | YE |
| | Elevation 2^{-1} $(Elevation 2^{-1}$ Rig South $Co. EllisD - E - F3549DDBuilt +7 + 3349%gas%gas%gas%gas%gas%gas%gas%gas%gas$ | $ \begin{array}{c c} Test No. \\ \hline Elevation 2239 \\ \hline (Gradeo (\\ \hline Rig Southwind \\ \hline Co. \\ \hline Eli \\ Southwind \\ \hline Co. \\ \hline Ell \\ Southwind \\ \hline Co. \\ \hline Ell \\ Southwind \\ \hline Co. \\ \hline Ell \\ \hline Southwind \\ \hline Co. \\ \hline Ell \\ \hline Southwind \\ \hline Co. \\ \hline Ell \\ \hline Co. \\ \hline Elevation \\ \hline Co. \\ \hline Elevation \\ \hline Co. \\ \hline Elevation \\ \hline Co. \\ \hline Comments \\ \hline Co. \\ \hline Comments \\ \hline C$ | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ |

Approved By ______ Our Representative _____ (and the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

| | OPERATOR | | |
|---|---|----------------------------|---------------------------------------|
| Company: Address: | TDI, INC 1310 BISON ROAD HAYS, KANSAS 67601 | | |
| Contact Geologist: Contact Phone Nbr: Well Name: Location: Pool: State: | TOM DENNING 785 259-3141 STACKHOUSE # 1 NE SE SW NE WILDCAT KANSAS | API: Field: Country: | 15-051-26,288-00-00 WILDCAT USA |
| | TDI, Inc. 1310 BISON ROAD HAYS, KANSAS 6760 (785) 628-2593 Scale 1:240 Imperial |) @ 1 | |
| Well Name: Surface Location: Bottom Location: API: | STACKHOUSE # 1 NE SE SW NE 15-051-26,288-00-00 | | |
| License Number: Spud Date: | 4787 5/24/2012 | Time: | 2:00 PM |
| Region: Drilling Completed: | ELLIS COUNTY 6/1/2012 | Time: | 2:10 PM |
| Surface Coordinates: Bottom Hole Coordinates: Ground Elevation: | 1995' FNL & 1575' FEL 2219.00ft | inne. | |
| K.B. Elevation: Logged Interval: Total Depth: Formation: Drilling Fluid Type: | 2229.00ft 0.00ft 3845.00ft LANSING-KANSAS CITY Chemical/Fresh Water Gel | To: | 0.00ft |
| | SURFACE CO-ORDINATES | 6 | |

| | SURFACE C | O-ORDINATES | |
|--------------------------|------------------------------------|-------------|--|
| Longitude: N/S Co-ord | Vertical 1995' FNL 1575' FEL | Latitude: | |

| LOGGED BY | | | | | | | |
|--|--|-------------------|--|--|--|--|--|
| The second secon | SOLU consu | | | | | | |
| Company: Address: | SOLUTIONS CONSULTING 108 W 35TH HAYS, KS 67601 | | | | | | |
| Phone Nbr: Logged By: | (785) 639-1337 Geologist | Name: HERB DEINES | | | | | |
| Contractor: | CONTRACTOR SOUTHWIND DRILLING INC. | | | | | | |

| | Rig #: Rig Type: Spud Date: TD Date: Rig Release: | MUD ROTARY 5/24/2012 6/1/2012 | 2:00 PM 2:10 PM 11:30 PM | |
|-----------|---|-------------------------------------|--------------------------------|--|
| \square | | | | |

ELEVATIONS

K.B. Elevation:2229.00ftK.B. to Ground:10.00ft

Ground Elevation: 2219.00ft

NOTES

RECOMMENDATION TO PLUG AND ABANDON WELL DUE TO LOW STRUCTURE TO OFFSET DRY HOLE AND NEGATIVE RESULTS OF DST # 1. TRACES OF FLAKEY GILSONITE WERE NOTED IN THE CONGLOMERATE SECTION WITH NO FREE OIL OR ODOR. ARBUCKLE TOO LOW TO PRODUCE WITH DECISION TO ABANDON TEST IN THE CONGLOMERATE. NO OPEN HOLE LOGS WERE RAN ON THE WELL.

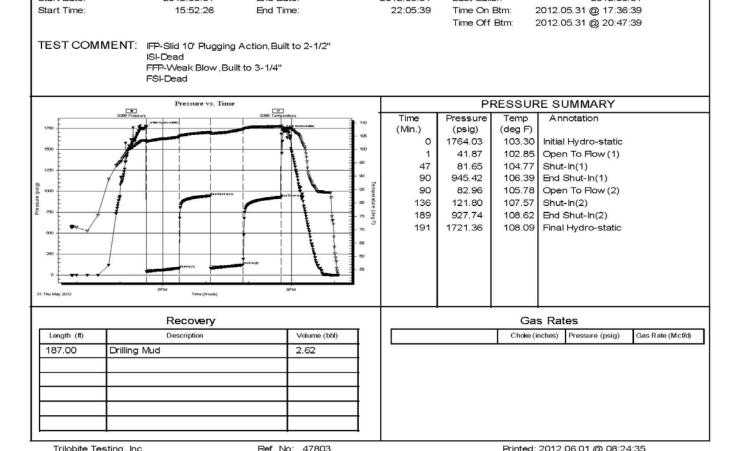
FORMATION TOPS SUMMARY AND DAILY ACTIVITY SUMMARY

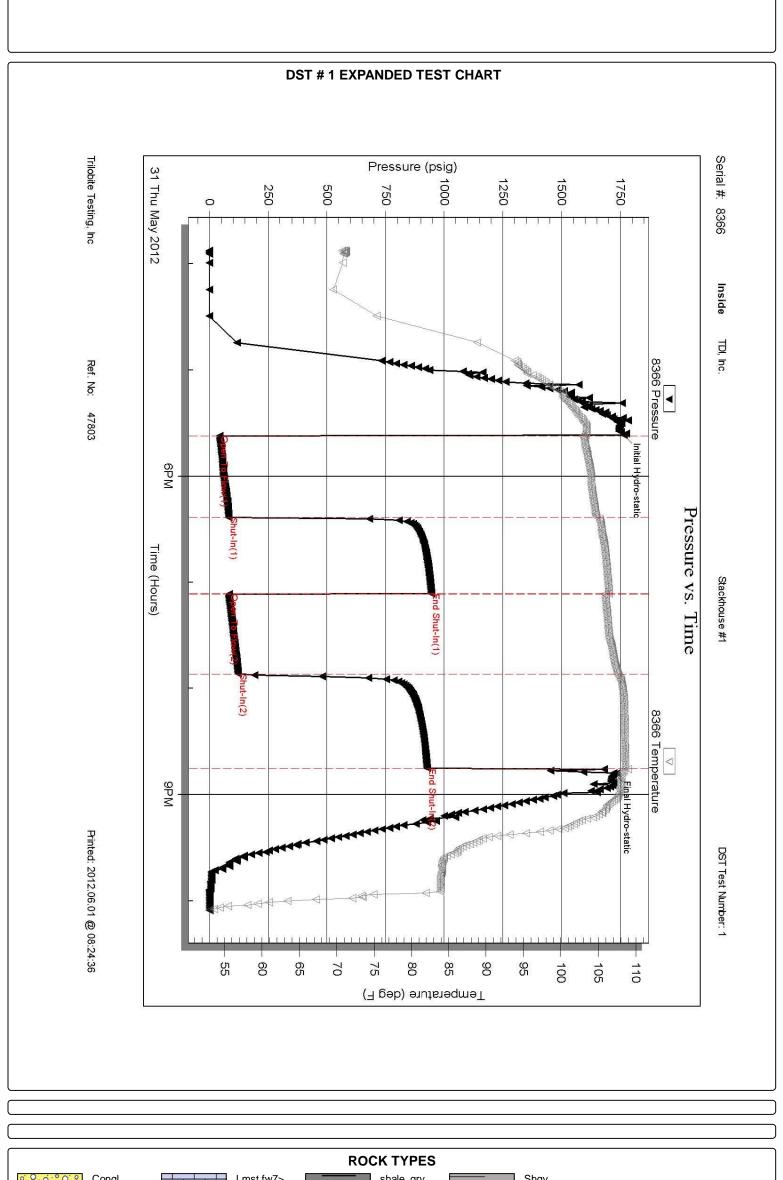
| STACKHOUSE #1 |
|-------------------|
| NE SE SW NE |
| Sec.18-12s-18w |
| 2219' GL 2229' KB |
| |

| FORMATION | SAMPLE TOPS |
|---------------|-------------|
| Anhydrite | 1531+ 698 |
| B-Anhydrite | 1565+ 664 |
| Topeka | 3240-1011 |
| Heebner Shale | 3473-1244 |
| Toronto | 3500-1271 |
| LKC | 3522-1293 |
| ВКС | 3759-1530 |
| RTD | 3845-1616 |

| 5-24-12 | RU, Spud, set surface casing to 213.92' w/150 sxs. Common, 2%gel, |
|---------|---|
| | 3%CC, Slope survey 0 degree, WOC 8 hrs. Plug down 6:45PM. |
| 5-25-12 | 214'rig down for holiday |
| 5-26-12 | 214'rig down for holiday |
| 5-27-12 | 214' finish surface work and drill plug |
| 5-28-12 | 538' drilling |
| 5-29-12 | 2140' drilling |
| 5-30-12 | 2945' drilling, displace 2861'-2875' |
| 5-31-12 | 3540', DST # 1, slope survey ½ degree |
| 6-01-12 | 3710', drilling, RTD 2:10 PM, plug and abandon test |
| | |

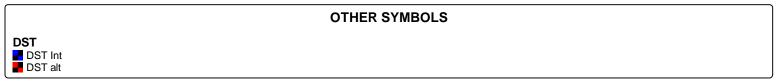
| | | DST # 1 S | UMMARY PAG | E | | | |
|--|-------------------|---------------------|------------|----------------|---------------------------|---------------|-------------|
| | | | | | | | |
| | OBITE | DRILL STEM T | EST REPO | DRT | | | |
| | - | TDI, Inc. | | 18-12s-18w | -Ellis | | |
| | STING , INC. | 1310 Bison Road | | Stackhous | Stackhouse #1 | | |
| | | Hays, KS. 67601 | | Job Ticket: 47 | 803 | DST#:1 | ť. |
| | | ATTN: Herb Deines | | Test Start: 20 | 12.05.31 @ | 9 15:52:24 | |
| GENERAL INFORM | | | | | | | |
| Formation: C-E | | | | | | | |
| Deviated: No Time Tool Opened: 17:3 | Whipstock: | 0.00 ft (KB) | | | Con∨entiona Jason McLe | al Bottom Hol | e (Initial) |
| Time Test Ended: 22:0 | | | | | 54 | | |
| Interval: 3540.0 | 0 ft (KB) To 36 | 11.00 ft (KB) (TVD) | | Reference Be | vations: | 2229.00 | ft (KB) |
| | 11.00 ft (KB) (TV | | | | | 2222.00 | |
| Hole Diameter: | 7.80 inchesHole | Condition: Good | | KB t | OGR/CF: | 7.00 | ft |
| Serial #: 8366 | Inside | | | | | | |
| Press@RunDepth: | 121.80 psig (| 2 3608.00 ft (KB) | | Capacity: | | 8000.00 | psia |
| Start Date: | 2012.05.31 | End Date: | 2012.05.31 | Last Calib .: | | 2012.05.31 | |
| Start Time: | 15:52:26 | End Time: | 22:05:39 | Time On Btm | 2012 05 31 | @ 17:36:39 | |

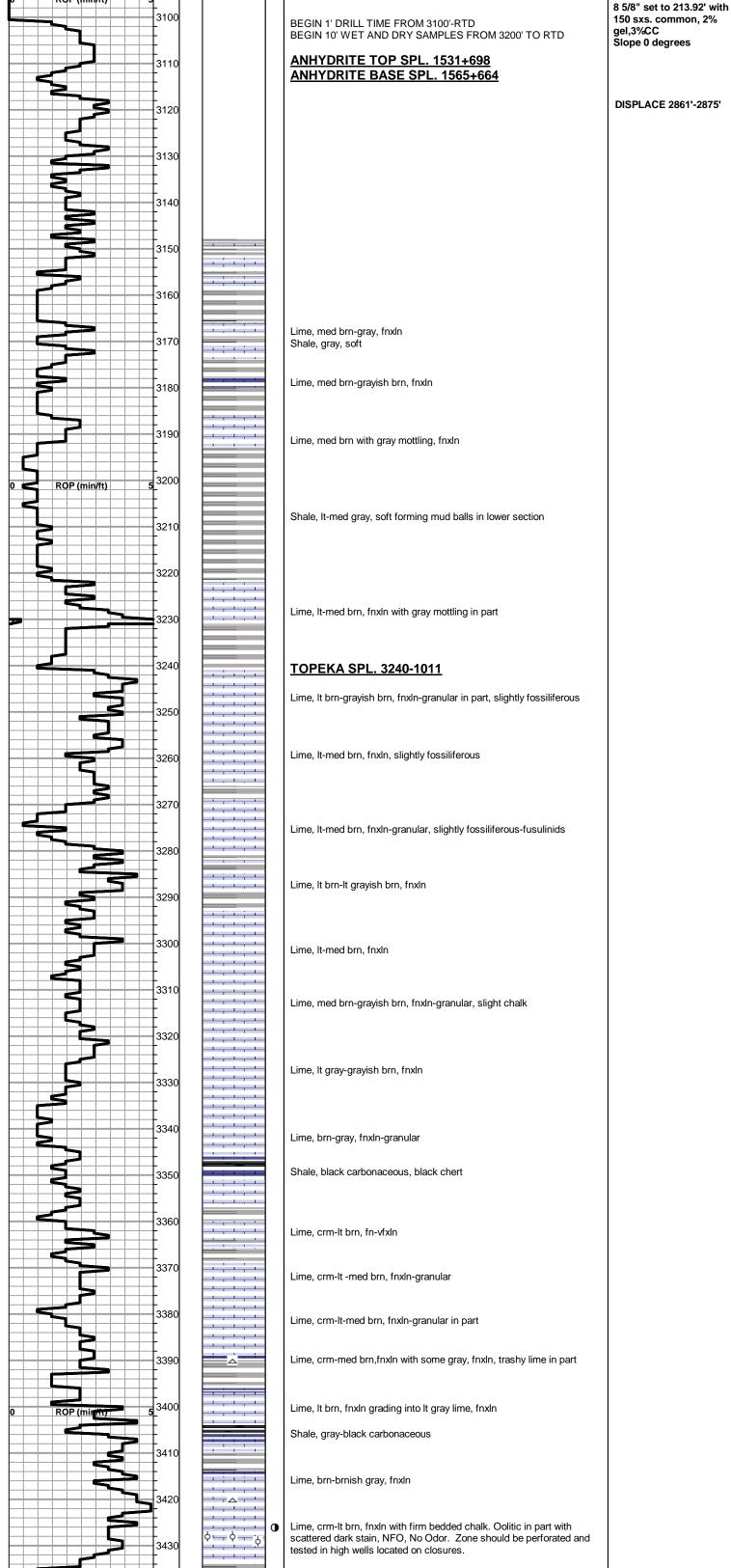




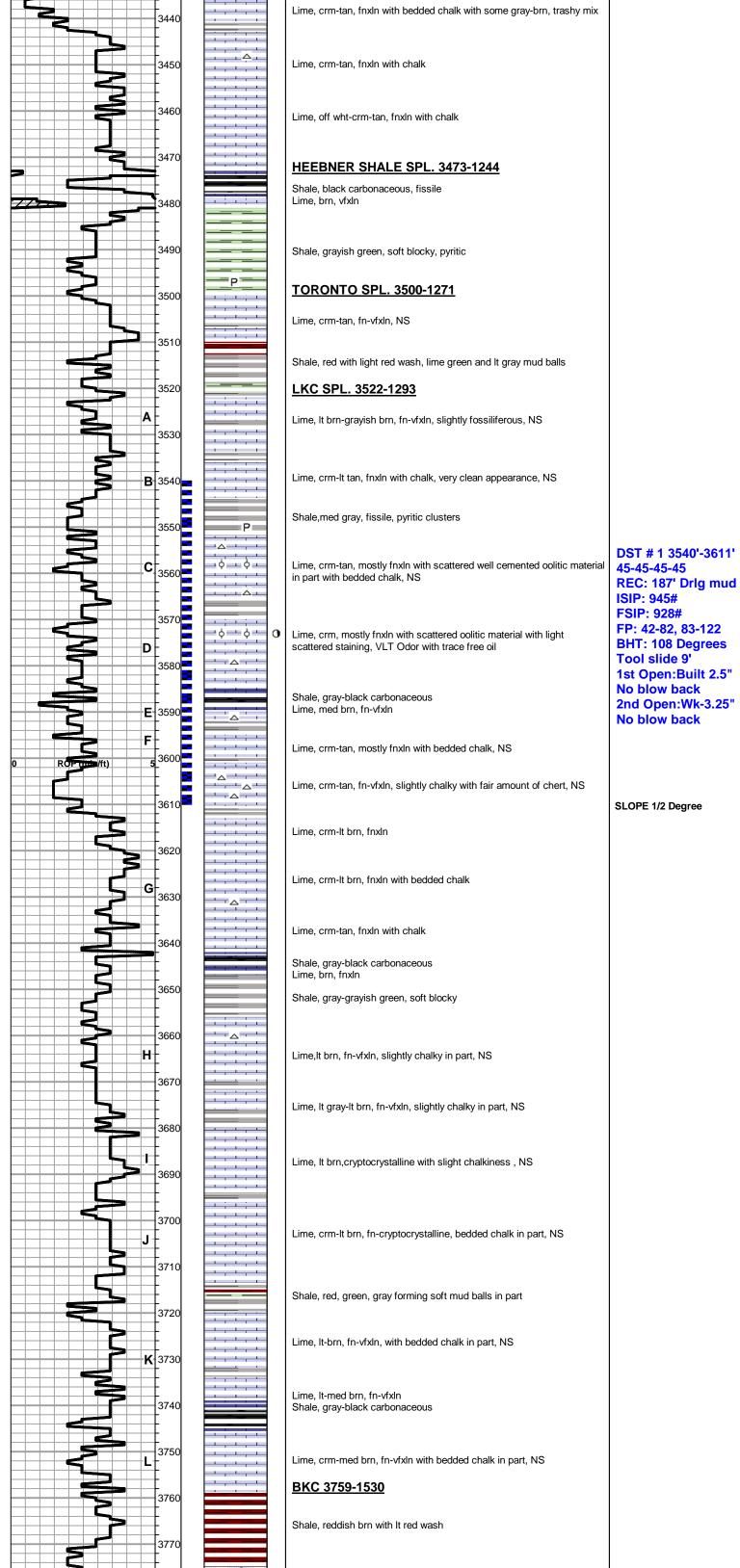
| 0.0.0 .0 . | Congi | | LINSUW/> | snale, yry | | Shgy |
|---------------------------|-----------|------------|------------|----------------|---------------------------------|---------|
| •. • . • • & • | Chtcongl | 0.⊕.0.88.0 | Lscongl | Carbon Sh | $\land \land \land \land \land$ | Cht brn |
| | Lmst fw<7 | | shale, grn | shale, red | | |

| | | ACCESSORIES |
|--|---------------------------|-------------|
| MINERAL ■ Carbonaceous Flakes P Pyrite Naricolored chert △ Chert White | FOSSIL ♦ Oolite | |





ROP (min/ft)



| | 3780 | | Lime, mix of brns, fnxln with some clastic mix with specks of glauconite in part | |
|---------------|---------------|-----------------|---|--|
| | 3790 | ··· | Lime, crm-lt brn, fnxln with vari colored cherts | |
| 0 ROP (mm/ft) | 5 3800 | o. Q. ∎ 6.0. o. | Shale, reddish brn-gray mix, soft blocky | |
| | 3810 | | Shale, reddish brn,gray, green with clastic mix of lime and chert with flaky gilsonite, NFO, No Odor, No staining | |
| 5 | 3820 | | Shale, reds, brns, grays, forming soft mud balls in part with scattered chert and oolitic chert | |
| | 3830 | <u>~</u> | Shale, red wash, chert, vari colored | |
| | 3840 | | Mix of vari color cherts, pyrite clusters and red shales Arbuckle not penetrated. | |

QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Home Office P.O. Box 32 Russell, KS 67665

398 No.

Phone 785-483-2025 Cell 785-324-1041

| 2 | | | | | | | | | |
|---|----------------|----------|---------------------|---|--|--------------------------|-------------------------------------|--|--|
| | Sec. | Twp. | Range | . (| County | State | On Location | Finish | |
| Date 5-24-12 | 18 | 12 | 18 | Eu | TS | KANSAS | | | |
| Lease STACKHOLLS | E V | Vell No. | -#1 | Locatio | on Hays-1 | UTO BUCKEYE | Ro-Jus-1 | SN-WINTE | |
| Contractor SauTHUSEND #1 | | | | | Owner T.D.T | | | | |
| Type Job SLARFACE | | | | | To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish | | | | |
| Hole Size 124" | T.D. 216 | | | cementer and helper to assist owner or contractor to do work as listed. | | | | | |
| Csg. 872" | e ¹ | Depth | | | Charge To | D.I | 2 | | |
| Tbg. Size | Depth | | | Street 1310 BUSSN RD- | | | | | |
| Tool | | Depth | | | City HAVS State KANSAS, 107601 | | | | |
| Cement Left in Csg. | | Shoe J | oint 15 | | | s done to satisfaction a | | | |
| Meas Line | | Displac | e 123/4' | | Cement Amo | ount Ordered 50 | <u>- DE- mai</u> | JGEL | |
| | EQUIPM | AENT | 2 | | | | | 3 | |
| Pumptrk 15 No. Ceme | | cK | | | Common / | 150 | | 8 | |
| Bulktrit 12 No. Driver | 1 | XGj | | | Poz. Mix | | | | |
| Bulktrk PL | | | | | Gel. 3 | | | | |
| JOB SERVICES & REMARKS | | | | | Calcium 5 | | | | |
| Remarks: | | | | | Hulis | | | | |
| Rat Hole | | | | | Sait | | | | |
| Mouse Hole | | | 22 - 102-00 - 102-0 | | Flowseal | | | | |
| Centralizers | | | | Kol-Seal | | | | | |
| Baskets | | | | | Mud CLR 48 | | | | |
| D/V or Port Collar | | | | | CFL-117 or CD110 CAF 38 | | | | |
| | .25 | | | · | Sand | | | j.ā | |
| · · · · · · · · · · · · · · · · · · · | | | | | Handling | 58 | | | |
| an a | ar Africa | | | | Mileage | | an and a state of the second second | | |
| and the second secon | | | | | | FLOAT EQUIPM | ÊNT | . <u>0</u> | |
| | | | | | Guide Shoe | | | | |
| CEMENT | TTY | TPA | ILL AT E | | Centralizer | | | | |
| | | | · · · · | 20 | Baskets | | De . | 10 000 | |
| | 9 <u>5</u> 6 | an i san | | | AFU Inserts | | | | |
| | | | | Float Shoe | | | 10 | | |
| | 81X 17 - 11 | | | | Latch Down | tin ti tip i | e ender de la | | |
| THANK | Vn | in la | | 1. | 22 Sharbareti o shirtare - andah an sekarar | | | | |
| | | a letta | | | n para t | | 21794.30 12 | | |
| | | | | | Pumptrk Cha | inge SurFac | .,e | 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | |
| | | | | н | | | 138 | | |
| | | | | | a a | 23 | Tax | | |
| 1 - | | 5 | | | | | Discount | | |
| X Signature | 1 | | | | | | Total Charge | | |
| 1 4 4 | | | | | | | 17.0 | L | |

| Phone 785-483-2025 Cell 785-324-1041 | Home Office | P.O. Box 32 Ru | 32 Russell, KS 67665 No. 675 | | | | |
|---|----------------------------|----------------|--|--|--------------------|--|--|
| 5 | Sec. Twp. Range | County | State | On Location | Finish | | |
| Date 6-1-12 1 | 8 12 18 | Elis | K5 | | S.Asp.m | | |
| Lease Stack House | Well No. | Location Hays. | V Bockage Re | 205 pr Wi | nto | | |
| Contractor Southwind |)#/ | Owner | | | | | |
| Type Job Rotary Plua | | | Oilwell Cementing, Ir reby requested to rep | ic. ht cementing equipmen | t and furnish | | |
| Hole Size 77/8 | T.D. 3845 | cementer a | ind helper to assist o | wner or contractor to d | o work as listed. | | |
| Csg. | Depth | Charge _ To | TAT | | | | |
| Tbg. Size | Depth | Street | 10. | | | | |
| Tool | Depth | City | | State | | | |
| Cement Left in Csg. | Shoe Joint | The above v | vas done to satisfaction | and supervision of owner | agent or contracto | | |
| Meas Line | Displace | Cement Ar | nount Ordered 22 | Dhala Holale | 11/4#70 | | |
| | QUIPMENT | | | | | | |
| PumptrkNo. Cemente Helper | Craig | Common | N.C. | -3 | | | |
| Bulktrk No. Driver | Brett | Poz. Mix | - * <u>-</u> | 18 | | | |
| Bulktrk S No. Driver | nd 1 | Gel. (* | | (% | - | | |
| | ICES & REMARKS | Calcium | | | | | |
| Remarks: | | Hulls | Huils | | | | |
| Rat Hole 2051 | | Sait | | | | | |
| Mouse Hole 155K | | Flowseal | | | | | |
| Centralizers | | Kol-Seal | | | | | |
| Baskets | | Mud CLR | Mud CLR 48 | | | | |
| D/V or Port Collar | | CFL-117 o | CFL-117 or CD110 CAF 38 | | | | |
| 157 1500 74 | 5-5K | Sand | Sand | | | | |
| 200 975 10 | 150 | Handling | 77 9 P | na. Aliantes e compositores de la compo | | | |
| 284 27- 40 | 2616 | Mileage | | | | | |
| 4 th 40 10 | 25K SK | | FLOAT EQUIF | MENT | 9 | | |
| | | Guide Sho | | | | | |
| | <u> </u> | Centralize | | Sen Alm | 1 | | |
| · ······· ··· · · · | | Baskets | 010 000 | | | | |
| | | AFUInser | c | | | | |
| | | Float Shoe | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | 2 7 8 8 | | |
| taka malani <u>ku</u> Maranakan arasis | | Latch Dow | n | | | | |
| a ta | v. n. j. | | | | 1 | | |
| | in the state of the second | | | | <u></u> | | |
| | | Dimeter C | Pumptrk Charge Dlug | | | | |
| | | | | | + | | |
| | | Mileage | | Tax | + | | |
| 22. | | | | Ian | | | |
| | | | | Discount | | | |
| x Signature Aury | | | | Discount Total Charge | | | |

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



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

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner Sam Brownback, Governor

June 20, 2012

Tom Denning TDI, Inc. 1310 BISON RD HAYS, KS 67601-9696

Re: ACO1 API 15-051-26288-00-00 Stackhouse 1 NE/4 Sec.18-12S-18W Ellis 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, Tom Denning