



1110503

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: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ | | | |
| 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: _____ _____ |
|--|---|---|

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Shell Gulf of Mexico Inc. |
| Well Name | Schubach Ranch 3510 3-1H |
| Doc ID | 1110503 |

Perforations

| Shots Per Foot | Perforation Record | Material Record | Depth |
|----------------|--------------------|---------------------------------------|-------|
| 6 | 5148 - 5458 | 172662 gals fluid; 91938# proppant | |
| 6 | 5533 - 5843 | 120924 gals fluid; 61627# proppant | |
| 6 | 5918 - 6225 | 160776 gals fluid; 76470# proppant | |
| 6 | 6303 - 6610 | 171780 gals fluid; 74897# proppant | |
| 6 | 6688 - 6996 | 153258 gals fluid; 77036# proppant | |
| 6 | 7073 - 7383 | 161279 gals fluid; 71332# proppant | |
| 6 | 7461 - 7768 | 173712 gals fluid; 73672# proppant | |
| 6 | 7843 - 8153 | 235485 gals fluid; 76179# proppant | |
| 6 | 8228 - 8538 | 166068 gals fluid; 74264# proppant | |
| 6 | 8613 - 8923 | 175702 gals fluid; 73473# proppant | |

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Shell Gulf of Mexico Inc. |
| Well Name | Schupbach Ranch 3510 3-1H |
| Doc ID | 1110503 |

Casing

| Purpose Of String | Size Hole Drilled | Size Casing Set | Weight | Setting Depth | Type Of Cement | Number of Sacks Used | Type and Percent Additives |
|-------------------|-------------------|-----------------|--------|---------------|-------------------|----------------------|----------------------------|
| Conductor | 26 | 18 | 47.76 | 60 | 1/2 Portland Cmt. | 42 | 15% Fly Ash |
| Surface | 12.25 | 9.625 | 36 | 799 | Class C | 500 | See attached |
| Intermediate | 8.75 | 7 | 23 | 4973 | Class C | 215 | See attached |
| Liner | 6.125 | 4.5 | 11.6 | 9052 | Class H | 370 | See attached |

SHELL GULF OF MEXICO, INC. (34574)

Schupbach Ranch 3510 3

| | | |
|---|--|--|
| <p>PETE MARTIN DRILLING (34645) (SET THE CONDUCTOR)</p> | <p>1H conductor</p> | |
| <p>Call in DATE OF SPUD</p> | <p>9/18/2012</p> | |
| <p>spud in date</p> | <p>9/19/2012</p> | <p>9/21/2012</p> |
| <p>T.D date</p> | <p>9/20/2012 9/22/2012</p> | |
| <p>Size Hole Drilled</p> | <p>26"</p> | <p>20"</p> |
| <p>Size Casing Set (in O.D)</p> | <p>18"</p> | <p>14"</p> |
| <p>conductor wall thickness</p> | <p>250</p> | <p>188</p> |
| <p>Weight Lbs./Ft.</p> | <p>47.76</p> | <p>27.76</p> |
| <p>Setting Depth</p> | <p>60'</p> | <p>78'</p> |
| <p>Type of Cement</p> | <p>Type 1/2 portland cement</p> | <p>Type 1/2 portland cement</p> |
| <p>Cubic yards of cement</p> | <p>7cy</p> | <p>8cy</p> |
| <p>2500 PSI Grout Mix</p> | <p>yes</p> | <p>yes</p> |
| <p>Type and Percent of Additives</p> | <p>15% fly ash</p> | <p>15% fly ash</p> |
| <p>Comments</p> | <p>0-20'dirt 20'-25' sand/water 25'-59' clay/water@27'/45'</p> | <p>0-20'dirt 20'-25' sand/water 25'-78' clay/water@27'/45'</p> |

CEMENT JOB REPORT



| | | | |
|--|---------------------------|----------------------|--------------------------------------|
| CUSTOMER SHELL WESTERN E & P INC | DATE 01-OCT-12 | F.R. # 1001938174 | SERV. SUPV. JONATHAN M SCHULZ III |
| LEASE & WELL NAME SCHUPBACH RANCH 3510 #3-1H - API 1500723929 | LOCATION 3-35S-10W | | COUNTY-PARISH-BLOCK Barber Kansas |
| DISTRICT McAlester | DRILLING CONTRACTOR RIG # | | TYPE OF JOB Surface |

| SIZE & TYPE OF PLUGS | LIST-CSG-HARDWARE | MECHANICAL BARRIERS | MD | TVD | HANGER TYPES | MD | TVD |
|---------------------------------------|----------------------|---------------------|----|-----|--------------|----|-----|
| 9-5/8" Top Cem Plug, Nitrile cvr, Phe | Provided by Customer | | | | | | |

| MATERIALS FURNISHED BY BJ | LAB REPORT NO. | PHYSICAL SLURRY PROPERTIES | | | | | | |
|--|----------------|--|----------------|---------------|-----------|------------------|------------|---------------|
| | | SACKS OF CEMENT | SLURRY WGT PPG | SLURRY YLD FT | WATER GPS | PUMP TIME HR:MIN | Bbl SLURRY | Bbl MIX WATER |
| fresh water | | | 8.34 | | | | 22 | |
| Class C + 2% CaCl2 + .25pps Celloflake | | 500 | 14.8 | 1.35 | 6.34 | 03:08 | 117 | 73.46 |
| Water | | | 8.34 | | | | 58.2 | |
| Available Mix Water <u>1000</u> Bbl. | | Available Displ. Fluid <u>900</u> Bbl. | | TOTAL | | | 197.2 | 73.46 |

| HOLE | | | TBG-CSG-D.P. | | | | | | | COLLAR DEPTHS | | |
|-------|----------|-------|--------------|-------|------|------|-----|-----|-------|---------------|-------|-------|
| SIZE | % EXCESS | DEPTH | ID | OD | WGT. | TYPE | MD | TVD | GRADE | SHOE | FLOAT | STAGE |
| 12.25 | | 809 | 8.921 | 9.625 | 36 | CSG | 799 | 799 | J-55 | | | |

| LAST CASING | | | | | PKR-CMT RET-BR PL-LINER | | | PERF. DEPTH | | TOP CONN | | WELL FLUID | |
|-------------|----|-----|------|----|-------------------------|--------------|-------|-------------|-----|----------|--------|----------------|------|
| ID | OD | WGT | TYPE | MD | TVD | BRAND & TYPE | DEPTH | TOP | BTM | SIZE | THREAD | TYPE | WGT. |
| 17. | 18 | 84 | | 60 | 60 | | | | | 9.625 | 8RD | WATER BASED MU | 8.5 |

| DISPL. VOLUME | | DISPL. FLUID | | CAL. PSI | CAL. MAX PSI | OP. MAX | MAX TBG PSI | | MAX CSG PSI | | MIX WATER |
|---------------|------|--------------|------|-----------|--------------|---------|-------------|----------|-------------|----------|------------|
| VOLUME | UOM | TYPE | WGT. | BUMP PLUG | TO REV. | SQ. PSI | RATED | Operator | RATED | Operator | WATER |
| 0 | BBLS | Water | 8.34 | 262 | | | | | 2816 | 2000 | Frac Tanks |

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: Arrive on location @ 2330, Running Casing,

| PRESSURE/RATE DETAIL | | | | | | EXPLANATION | | | | | |
|----------------------|----------------|---------|----------|-------------------|------------|--|--|--|--|--|--|
| TIME HR:MIN. | PRESSURE - PSI | | RATE BPM | Bbl. FLUID PUMPED | FLUID TYPE | SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/> | | | | | |
| | PIPE | ANNULUS | | | | TEST LINES 3261 PSI | | | | | |
| | | | | | | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/> | | | | | |
| 23:30 | | | | | | Arrive on location | | | | | |
| 06:28 | 3261 | | | | WATER | test pumps & lines | | | | | |
| 06:30 | 196 | | 4 | | WATER | open well/start water ahead | | | | | |
| 06:35 | 151 | | 4 | 22 | WATER | end water spacer/start slurry @ 14.8ppg | | | | | |
| 07:15 | 80 | | 2 | 116 | SLURRY | bbls pumped when cement to surface | | | | | |
| 07:16 | 72 | | 2 | 117 | SLURRY | end slurry/ shutdown | | | | | |
| 07:19 | 209 | | 4 | | WATER | drop TRP/start displacement | | | | | |
| 07:31 | 291 | | 3 | 50 | WATER | bbls pumped slow rate to bump | | | | | |
| 07:33 | 974 | | 3 | 58.2 | WATER | bump plug/ shutdown/ begin casing test | | | | | |
| 07:45 | 0 | | | -.25 | | end casing test/check float/ holding/ .25bbls back | | | | | |
| | | | | | | 58 bbls cement return to surface | | | | | |
| | | | | | | Thanks for using BHI Pressure Pumping | | | | | |
| | | | | | | Jonathan Schulz & Crew | | | | | |

| BUMPED PLUG | PSI TO BUMP PLUG | TEST FLOAT EQUIP. | BBL.CMT RETURNS/ REVERSED | TOTAL BBL. PUMPED | PSI LEFT ON CSG | SPOT TOP OUT CEMENT | SERVICE SUPERVISOR SIGNATURE: |
|--|------------------|--|---------------------------|-------------------|-----------------|--|-------------------------------|
| <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 974 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 58 | 197.2 | 0 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | |

CEMENT JOB REPORT



| | | | |
|--|---------------------------|----------------------|--------------------------------------|
| CUSTOMER SHELL WESTERN E & P INC | DATE 09-OCT-12 | F.R. # 1001939143 | SERV. SUPV. JUSTIN D STAMPER |
| LEASE & WELL NAME SCHUPBACH RANCH 3510 #3-1H - API 1500723929 | LOCATION 3-35S-10W | | COUNTY-PARISH-BLOCK Barber Kansas |
| DISTRICT McAlester | DRILLING CONTRACTOR RIG # | | TYPE OF JOB Intermediate |

| SIZE & TYPE OF PLUGS | LIST-CSG-HARDWARE | MECHANICAL BARRIERS | MD | TVD | HANGER TYPES | MD | TVD |
|------------------------------------|-------------------|---------------------|----|-----|--------------|----|-----|
| 7" Top Cem Plug, Nitrile cvr, Phen | No Shoe | | | | | | |

| MATERIALS FURNISHED BY BJ | LAB REPORT NO. | PHYSICAL SLURRY PROPERTIES | | | | | | |
|---|----------------|---|----------------|---------------|-----------|------------------|------------|---------------|
| | | SACKS OF CEMENT | SLURRY WGT PPG | SLURRY YLD FT | WATER GPS | PUMP TIME HR:MIN | Bbl SLURRY | Bbl MIX WATER |
| SEALBOND | | | 8.45 | | | | 40 | |
| 15:85:8(POZ,C,GEL)+10%SALT+.5%SMS+4PPS KOLS | | 130 | 12.4 | 2.45 | 13.51 | | 56 | 41.28 |
| 50:50:2(POZ,C,GEL)+4#KOLSL+.15%SMS+.3%FL52 | | 85 | 14.2 | 1.32 | 5.66 | | 20 | 11.46 |
| WATER | | | 8.34 | | | | 194 | |
| Available Mix Water <u>1000</u> Bbl. | | Available Displ. Fluid <u>1000</u> Bbl. | | TOTAL | | | <u>310</u> | <u>52.75</u> |

| HOLE | | | TBG-CSG-D.P. | | | | | | COLLAR DEPTHS | | | |
|------|----------|-------|--------------|----|------|------|------|------|---------------|------|-------|-------|
| SIZE | % EXCESS | DEPTH | ID | OD | WGT. | TYPE | MD | TVD | GRADE | SHOE | FLOAT | STAGE |
| 8.75 | | 4973 | 6.366 | 7 | 23 | CSG | 4973 | 4800 | L-80 | 4973 | 4931 | |

| LAST CASING | | | | PKR-CMT RET-BR PL-LINER | | | | PERF. DEPTH | | TOP CONN | | WELL FLUID | | |
|-------------|-------|-----|------|-------------------------|-----|--------------|--|-------------|------|----------|------|------------|----------------|------|
| ID | OD | WGT | TYPE | MD | TVD | BRAND & TYPE | | DEPTH | TOP | BTM | SIZE | THREAD | TYPE | WGT. |
| 8.9 | 9.625 | 36 | | 800 | 800 | | | | 4600 | 4600 | 7 | 8RD | WATER BASED MU | 9.2 |

| DISPL. VOLUME | | DISPL. FLUID | | CAL. PSI | CAL. MAX PSI | OP. MAX | MAX TBG PSI | | MAX CSG PSI | | MIX WATER | |
|---------------|------|--------------|--|----------|--------------|---------|-------------|-------|-------------|-------|-----------|-----|
| VOLUME | UOM | TYPE | | WGT. | BUMP PLUG | TO REV. | SQ. PSI | RATED | Operator | RATED | Operator | RIG |
| 194 | BBLs | WATER | | 8.34 | 900 | | | | | 5072 | 3000 | RIG |

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING ARRIVE ON LOCATION, RIG UP, WAIT ON RIG

| PRESSURE/RATE DETAIL | | | | | | EXPLANATION | |
|----------------------|----------------|---------|----------|-------------------|------------|--|--|
| TIME HR:MIN. | PRESSURE - PSI | | RATE BPM | Bbl. FLUID PUMPED | FLUID TYPE | SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/> | |
| | PIPE | ANNULUS | | | | TEST LINES 5100 PSI | |
| | | | | | | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/> | |
| 22:00 | | | | | | ARRIVE ON LOCATION | |
| 23:00 | | | | | | SAFETY MEETING | |
| 23:52 | 5100 | | | | WATER | TEST LINES, START LEAD SLURRY | |
| 00:07 | 150 | | 5 | 56 | LEAD | FINISH LEAD, START TAIL SLURRY | |
| 00:15 | 130 | | 3 | 20 | TAIL | FINISH TAIL SLURRY, SHUT DOWN, DROP PLUG AND DISPLACE | |
| 00:55 | 900 | | 4 | 183 | WATER | SLOW TO BUMP PLUG | |
| 01:01 | 700 | | 2 | 11 | WATER | BUMP PLUG PRESSURE TO 2000 PSI | |
| 01:21 | 0 | | | | WATER | BLEED OFF RECIVED 2 BBLs BACK TO TRUCK | |
| | | | | | | FLAOTS HOLDING | |
| | | | | | | THANK YOU FOR USING BHI | |
| | | | | | | JUSTIN STAMPER AND CREW | |

| BUMPED PLUG | PSI TO BUMP PLUG | TEST FLOAT EQUIP. | BBL.CMT RETURNS/ REVERSED | TOTAL BBL. PUMPED | PSI LEFT ON CSG | SPOT TOP OUT CEMENT | SERVICE SUPERVISOR SIGNATURE: |
|--|------------------|--|---------------------------|-------------------|-----------------|--|-------------------------------|
| <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 2000 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 0 | 269 | 0 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | |

CEMENT JOB REPORT



| | | | |
|--|---------------------------|----------------------|--------------------------------------|
| CUSTOMER SHELL WESTERN E & P INC | DATE 14-OCT-12 | F.R. # 1001941158 | SERV. SUPV. James Kirkpatrick |
| LEASE & WELL NAME SCHUPBACH RANCH 3510 #3-1H - API 1500723929 | LOCATION 3-35S-10W | | COUNTY-PARISH-BLOCK Barber Kansas |
| DISTRICT McAlester | DRILLING CONTRACTOR RIG # | | TYPE OF JOB Liner |

| SIZE & TYPE OF PLUGS | LIST-CSG-HARDWARE | MECHANICAL BARRIERS | MD | TVD | HANGER TYPES | MD | TVD |
|---------------------------------------|-------------------|---------------------|----|-----|--------------|----|-----|
| 4-1/2" Bot Cem Plug, Nitrile cvr, Phe | No Shoe | | | | | | |
| 4-1/2" Top Cem Plug, Nitrile cvr, Phe | | | | | | | |

| MATERIALS FURNISHED BY BJ | LAB REPORT NO. | PHYSICAL SLURRY PROPERTIES | | | | | | |
|-------------------------------------|----------------|--|----------------|---------------|-----------|------------------|---------------|---------------|
| | | SACKS OF CEMENT | SLURRY WGT PPG | SLURRY YLD FT | WATER GPS | PUMP TIME HR:MIN | Bbl SLURRY | Bbl MIX WATER |
| SealBond Spacer | | | 8.45 | | | | 40 | |
| H50:50 + Additives | | 370 | 14.3 | 1.24 | 5.54 | 04:45 | 81.95 | 48.77 |
| Displacement | | | 8.34 | | | | 113 | |
| Available Mix Water <u>250</u> Bbl. | | Available Displ. Fluid <u>250</u> Bbl. | | TOTAL | | | <u>234.95</u> | <u>48.77</u> |

| HOLE | | | TBG-CSG-D.P. | | | | | | COLLAR DEPTHS | | | |
|-------|----------|-------|--------------|-----|------|------|------|------|---------------|------|-------|-------|
| SIZE | % EXCESS | DEPTH | ID | OD | WGT. | TYPE | MD | TVD | GRADE | SHOE | FLOAT | STAGE |
| 6.125 | | 9052 | 4 | 4.5 | 11.6 | CSG | 4500 | 4500 | | 9052 | 8966 | |

| LAST CASING | | | | | PKR-CMT RET-BR PL-LINER | | | PERF. DEPTH | | TOP CONN | | WELL FLUID | | |
|-------------|----|-----|------|------|-------------------------|--------------|--|-------------|-----|----------|------|------------|----------------|------|
| ID | OD | WGT | TYPE | MD | TVD | BRAND & TYPE | | DEPTH | TOP | BTM | SIZE | THREAD | TYPE | WGT. |
| 6.4 | 7 | 23 | | 5107 | 5107 | | | | | | 4.5 | 8RD | WATER BASED MU | 9 |

| DISPL. VOLUME | | DISPL. FLUID | | CAL. PSI | CAL. MAX PSI | OP. MAX | MAX TBG PSI | | MAX CSG PSI | | MIX WATER | |
|---------------|------|--------------|--|----------|--------------|---------|-------------|-------|-------------|-------|-----------|-----------|
| VOLUME | UOM | TYPE | | WGT. | BUMP PLUG | TO REV. | SQ. PSI | RATED | Operator | RATED | Operator | MIX WATER |
| 113 | BBLS | Displacement | | 8.34 | 3000 | | | | | 3186 | | RIG TANK |

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: NO TROUBLE RIGGING UP OR PUMPING JOB

| PRESSURE/RATE DETAIL | | | | | | EXPLANATION | | | | | |
|--|----------------|---------|----------|-------------------|------------|--|--|--|--|--|--|
| TIME HR:MIN. | PRESSURE - PSI | | RATE BPM | Bbl. FLUID PUMPED | FLUID TYPE | SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/> | | | | | |
| | PIPE | ANNULUS | | | | TEST LINES 6000 PSI | | | | | |
| 09:45 | 6146 | | | | H2O | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/> | | | | | |
| 10:15 | 414 | | 4 | 82 | CMT | TEST PUMP AND LINES TO 6000 PSI AND START CMT @ 14.3 PPG | | | | | |
| 11:00 | 3955 | | 4 | 113 | H2O | PUMP 82 BBL CMT @ 14.3 PPG, DROP PLUG AND START H2O DISP | | | | | |
| | | | | | H2O | PUMP 113 BBL H2O DISP, BUMP PLUG, TEST FLOAT, HOLDING | | | | | |
| | | | | | H2O | CAUGHT CMT @ 27 BBL DISP AWAY | | | | | |
| | | | | | H2O | BUMPED FIRST PLUG @ 43.5 BBL DISP AWAY | | | | | |
| 11:30 | 4500 | | | | H2O | PRESSURE UP TO 4500 PSI AND HOLD FOR @ 15 MIN, BLEED OFF | | | | | |
| 12:00 | | | | | | TURN OVER TO RIG TO CIRC OUT THE LONG WAY, RIG DOWN PUMP AND LINES | | | | | |
| THANK YOU FOR USING BAKER HUGHES, JIM AND CREW | | | | | | | | | | | |

| BUMPED PLUG | PSI TO BUMP PLUG | TEST FLOAT EQUIP. | BBL.CMT RETURNS/ REVERSED | TOTAL BBL. PUMPED | PSI LEFT ON CSG | SPOT TOP OUT CEMENT | SERVICE SUPERVISOR SIGNATURE: |
|--|------------------|--|---------------------------|-------------------|-----------------|--|-------------------------------|
| <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 3200 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 0 | 195 | 0 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | |

Shell Exploration & Production Co. Inc.

Barber Co. KS (NAD-27)

Sec 04-T35S-R10W

Schupbach Ranch 3510 3-1H

API# 15007392901 / JOB# 9504798 / N180

Wellbore #1

Design: Wellbore #1

Sperry Drilling Services Combo Report

18 October, 2012

Surface UWI : API# 15007392901 / JOB# 9504798 / N180

Well Coordinates: 129,623.13 N, 2,030,843.42 E (37° 01' 21.39" N, 098° 23' 39.70" W)

Ground Level: 1,282.00 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Schupbach Ranch 3510 3-1H

well @ 1305.80ft (Original Well Elev)

N

True

API US Survey Feet

Version: 2003.21 Build: 43

HALLIBURTON

Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | TVD below System (ft) | Vertical Depth (ft) | Local Coordinates | | Map Coordinates | | Dogleg Rate (°/100ft) | Vertical Section (ft) | Comments |
|---------------------------|--------------------|----------------|-----------------------------|---------------------------|-------------------|-----------------|------------------|-----------------|-----------------------------|-----------------------------|-------------------------|
| | | | | | Northing (ft) | Easting (ft) | Northing (ft) | Easting (ft) | | | |
| 0.00 | 0.00 | 0.00 | -1,305.80 | 0.00 | 0.00 N | 0.00 E | 129,623.13 | 2,030,843.42 | 0.00 | 0.00 | |
| 100.00 | 0.13 | 87.39 | -1,205.80 | 100.00 | 0.01 N | 0.11 E | 129,623.14 | 2,030,843.53 | 0.13 | 0.01 | First Gyro Survey |
| 200.00 | 0.16 | 72.65 | -1,105.80 | 200.00 | 0.05 N | 0.36 E | 129,623.18 | 2,030,843.78 | 0.05 | 0.06 | |
| 300.00 | 0.12 | 92.47 | -1,005.80 | 300.00 | 0.09 N | 0.60 E | 129,623.22 | 2,030,844.02 | 0.06 | 0.10 | |
| 400.00 | 0.09 | 78.30 | -905.80 | 400.00 | 0.10 N | 0.78 E | 129,623.23 | 2,030,844.20 | 0.04 | 0.11 | |
| 500.00 | 0.08 | 97.35 | -805.80 | 500.00 | 0.11 N | 0.93 E | 129,623.24 | 2,030,844.35 | 0.03 | 0.12 | |
| 600.00 | 0.10 | 38.38 | -705.80 | 600.00 | 0.17 N | 1.05 E | 129,623.30 | 2,030,844.47 | 0.09 | 0.18 | |
| 700.00 | 0.13 | 91.13 | -605.80 | 700.00 | 0.23 N | 1.22 E | 129,623.36 | 2,030,844.64 | 0.11 | 0.25 | |
| 745.00 | 0.42 | 65.42 | -560.80 | 745.00 | 0.30 N | 1.42 E | 129,623.43 | 2,030,844.84 | 0.68 | 0.31 | Final Gyro Survey |
| 900.00 | 0.09 | 297.99 | -405.80 | 900.00 | 0.59 N | 1.83 E | 129,623.73 | 2,030,845.25 | 0.31 | 0.61 | First Sperry MWD Survey |
| 1,090.00 | 0.15 | 19.31 | -215.80 | 1,090.00 | 0.90 N | 1.78 E | 129,624.03 | 2,030,845.20 | 0.09 | 0.92 | |
| 1,278.00 | 0.22 | 9.91 | -27.80 | 1,278.00 | 1.49 N | 1.92 E | 129,624.62 | 2,030,845.34 | 0.04 | 1.51 | |
| 1,465.00 | 0.15 | 15.74 | 159.19 | 1,464.99 | 2.08 N | 2.05 E | 129,625.21 | 2,030,845.47 | 0.04 | 2.10 | |
| 1,653.00 | 0.39 | 4.80 | 347.19 | 1,652.99 | 2.95 N | 2.17 E | 129,626.08 | 2,030,845.59 | 0.13 | 2.97 | |
| 1,840.00 | 0.31 | 66.97 | 534.19 | 1,839.99 | 3.78 N | 2.69 E | 129,626.92 | 2,030,846.10 | 0.20 | 3.81 | |
| 2,026.00 | 0.39 | 35.96 | 720.19 | 2,025.99 | 4.49 N | 3.52 E | 129,627.63 | 2,030,846.94 | 0.11 | 4.53 | |
| 2,214.00 | 0.54 | 15.56 | 908.18 | 2,213.98 | 5.86 N | 4.14 E | 129,629.00 | 2,030,847.55 | 0.12 | 5.90 | |
| 2,404.00 | 0.62 | 25.71 | 1,098.17 | 2,403.97 | 7.65 N | 4.82 E | 129,630.79 | 2,030,848.23 | 0.07 | 7.70 | |
| 2,594.00 | 0.72 | 31.85 | 1,288.16 | 2,593.96 | 9.59 N | 5.90 E | 129,632.73 | 2,030,849.31 | 0.06 | 9.65 | |
| 2,784.00 | 0.99 | 45.81 | 1,478.14 | 2,783.94 | 11.75 N | 7.71 E | 129,634.89 | 2,030,851.11 | 0.18 | 11.83 | |
| 2,973.00 | 1.16 | 52.83 | 1,667.10 | 2,972.90 | 14.04 N | 10.40 E | 129,637.19 | 2,030,853.80 | 0.11 | 14.15 | |
| 3,163.00 | 1.41 | 49.94 | 1,857.06 | 3,162.86 | 16.71 N | 13.72 E | 129,639.86 | 2,030,857.12 | 0.14 | 16.85 | |
| 3,353.00 | 1.38 | 41.86 | 2,047.00 | 3,352.80 | 19.92 N | 17.04 E | 129,643.07 | 2,030,860.44 | 0.10 | 20.09 | |
| 3,543.00 | 1.38 | 49.91 | 2,236.94 | 3,542.74 | 23.10 N | 20.31 E | 129,646.25 | 2,030,863.71 | 0.10 | 23.30 | |
| 3,733.00 | 1.23 | 53.14 | 2,426.89 | 3,732.69 | 25.79 N | 23.70 E | 129,648.95 | 2,030,867.09 | 0.09 | 26.03 | |
| 3,923.00 | 0.74 | 55.82 | 2,616.87 | 3,922.67 | 27.71 N | 26.34 E | 129,650.87 | 2,030,869.73 | 0.26 | 27.97 | |
| 4,113.00 | 0.65 | 46.28 | 2,806.85 | 4,112.65 | 29.14 N | 28.14 E | 129,652.30 | 2,030,871.52 | 0.08 | 29.42 | |
| 4,176.00 | 3.64 | 351.84 | 2,869.80 | 4,175.60 | 31.37 N | 28.11 E | 129,654.53 | 2,030,871.50 | 5.25 | 31.65 | |
| 4,208.00 | 5.71 | 355.53 | 2,901.70 | 4,207.50 | 33.96 N | 27.84 E | 129,657.12 | 2,030,871.22 | 6.53 | 34.24 | |
| 4,271.00 | 8.58 | 3.28 | 2,964.20 | 4,270.00 | 41.78 N | 27.87 E | 129,664.94 | 2,030,871.24 | 4.80 | 42.05 | |
| 4,303.00 | 10.15 | 5.17 | 2,995.77 | 4,301.57 | 46.97 N | 28.26 E | 129,670.13 | 2,030,871.63 | 5.00 | 47.25 | |
| 4,336.00 | 12.34 | 5.12 | 3,028.14 | 4,333.94 | 53.38 N | 28.84 E | 129,676.54 | 2,030,872.20 | 6.64 | 53.66 | |
| 4,366.00 | 14.89 | 5.54 | 3,057.29 | 4,363.09 | 60.41 N | 29.49 E | 129,683.57 | 2,030,872.85 | 8.51 | 60.70 | |
| 4,398.00 | 17.13 | 6.41 | 3,088.05 | 4,393.85 | 69.19 N | 30.42 E | 129,692.35 | 2,030,873.76 | 7.04 | 69.48 | |
| 4,428.00 | 20.20 | 6.97 | 3,116.47 | 4,422.27 | 78.72 N | 31.54 E | 129,701.89 | 2,030,874.87 | 10.25 | 79.03 | |
| 4,460.00 | 23.56 | 6.46 | 3,146.16 | 4,451.96 | 90.56 N | 32.93 E | 129,713.73 | 2,030,876.25 | 10.52 | 90.88 | |
| 4,491.00 | 26.26 | 4.63 | 3,174.27 | 4,480.07 | 103.56 N | 34.18 E | 129,726.72 | 2,030,877.48 | 9.06 | 103.89 | |
| 4,523.00 | 29.52 | 0.65 | 3,202.56 | 4,508.36 | 118.50 N | 34.84 E | 129,741.67 | 2,030,878.13 | 11.73 | 118.84 | |
| 4,554.00 | 32.63 | 358.04 | 3,229.10 | 4,534.90 | 134.49 N | 34.64 E | 129,757.66 | 2,030,877.91 | 10.93 | 134.83 | |

Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | TVD below System (ft) | Vertical Depth (ft) | Local Coordinates | | Map Coordinates | | Dogleg Rate (°/100ft) | Vertical Section (ft) | Comments |
|---------------------|-----------------|-------------|-----------------------|---------------------|-------------------|--------------|-----------------|--------------|-----------------------|-----------------------|----------|
| | | | | | Northing (ft) | Easting (ft) | Northing (ft) | Easting (ft) | | | |
| 4,586.00 | 36.15 | 356.19 | 3,255.51 | 4,561.31 | 152.54 N | 33.72 E | 129,775.71 | 2,030,876.97 | 11.47 | 152.87 | |
| 4,618.00 | 39.70 | 355.41 | 3,280.75 | 4,586.55 | 172.15 N | 32.27 E | 129,795.32 | 2,030,875.50 | 11.19 | 172.46 | |
| 4,649.00 | 43.28 | 354.80 | 3,303.96 | 4,609.76 | 192.61 N | 30.52 E | 129,815.77 | 2,030,873.72 | 11.62 | 192.90 | |
| 4,681.00 | 46.80 | 355.11 | 3,326.57 | 4,632.37 | 215.16 N | 28.53 E | 129,838.32 | 2,030,871.71 | 11.02 | 215.44 | |
| 4,713.00 | 50.23 | 355.18 | 3,347.77 | 4,653.57 | 239.05 N | 26.50 E | 129,862.20 | 2,030,869.65 | 10.72 | 239.30 | |
| 4,744.00 | 53.59 | 356.06 | 3,366.89 | 4,672.69 | 263.37 N | 24.64 E | 129,886.53 | 2,030,867.76 | 11.07 | 263.60 | |
| 4,776.00 | 56.98 | 356.37 | 3,385.11 | 4,690.91 | 289.61 N | 22.91 E | 129,912.77 | 2,030,866.00 | 10.62 | 289.83 | |
| 4,807.00 | 61.25 | 356.11 | 3,401.02 | 4,706.82 | 316.15 N | 21.16 E | 129,939.31 | 2,030,864.22 | 13.79 | 316.35 | |
| 4,839.00 | 65.42 | 355.37 | 3,415.38 | 4,721.18 | 344.66 N | 19.03 E | 129,967.81 | 2,030,862.06 | 13.19 | 344.84 | |
| 4,871.00 | 70.16 | 354.93 | 3,427.47 | 4,733.27 | 374.17 N | 16.53 E | 129,997.32 | 2,030,859.52 | 14.87 | 374.32 | |
| 4,902.00 | 75.24 | 354.89 | 3,436.68 | 4,742.48 | 403.65 N | 13.90 E | 130,026.79 | 2,030,856.87 | 16.39 | 403.76 | |
| 5,063.00 | 84.98 | 359.20 | 3,464.32 | 4,770.12 | 561.82 N | 5.83 E | 130,184.95 | 2,030,848.61 | 6.60 | 561.85 | |
| 5,158.00 | 90.43 | 359.42 | 3,468.12 | 4,773.92 | 656.70 N | 4.69 E | 130,279.83 | 2,030,847.36 | 5.74 | 656.71 | |
| 5,253.00 | 90.92 | 0.40 | 3,467.00 | 4,772.80 | 751.69 N | 4.54 E | 130,374.82 | 2,030,847.10 | 1.15 | 751.70 | |
| 5,348.00 | 89.66 | 359.24 | 3,466.52 | 4,772.32 | 846.68 N | 4.24 E | 130,469.82 | 2,030,846.70 | 1.80 | 846.68 | |
| 5,443.00 | 91.08 | 1.34 | 3,465.91 | 4,771.71 | 941.67 N | 4.72 E | 130,564.81 | 2,030,847.07 | 2.67 | 941.67 | |
| 5,537.00 | 91.60 | 1.25 | 3,463.71 | 4,769.51 | 1,035.62 N | 6.84 E | 130,658.76 | 2,030,849.09 | 0.56 | 1,035.64 | |
| 5,632.00 | 90.65 | 0.06 | 3,461.84 | 4,767.64 | 1,130.60 N | 7.93 E | 130,753.73 | 2,030,850.07 | 1.60 | 1,130.62 | |
| 5,727.00 | 91.54 | 1.42 | 3,460.03 | 4,765.83 | 1,225.57 N | 9.15 E | 130,848.70 | 2,030,851.19 | 1.71 | 1,225.60 | |
| 5,822.00 | 91.23 | 1.65 | 3,457.73 | 4,763.53 | 1,320.51 N | 11.70 E | 130,943.64 | 2,030,853.62 | 0.41 | 1,320.56 | |
| 5,917.00 | 91.57 | 3.30 | 3,455.41 | 4,761.21 | 1,415.38 N | 15.80 E | 131,038.53 | 2,030,857.62 | 1.77 | 1,415.47 | |
| 6,012.00 | 90.62 | 3.41 | 3,453.59 | 4,759.39 | 1,510.20 N | 21.36 E | 131,133.35 | 2,030,863.07 | 1.01 | 1,510.34 | |
| 6,106.00 | 90.00 | 1.23 | 3,453.08 | 4,758.88 | 1,604.12 N | 25.16 E | 131,227.27 | 2,030,866.76 | 2.41 | 1,604.29 | |
| 6,201.00 | 90.31 | 0.86 | 3,452.83 | 4,758.63 | 1,699.10 N | 26.90 E | 131,322.26 | 2,030,868.39 | 0.51 | 1,699.29 | |
| 6,296.00 | 89.26 | 359.07 | 3,453.18 | 4,758.98 | 1,794.10 N | 26.84 E | 131,417.25 | 2,030,868.22 | 2.18 | 1,794.27 | |
| 6,391.00 | 90.22 | 359.61 | 3,453.62 | 4,759.42 | 1,889.09 N | 25.74 E | 131,512.24 | 2,030,867.02 | 1.16 | 1,889.25 | |
| 6,486.00 | 89.78 | 358.92 | 3,453.62 | 4,759.42 | 1,984.08 N | 24.52 E | 131,607.23 | 2,030,865.70 | 0.86 | 1,984.23 | |
| 6,580.00 | 90.37 | 0.49 | 3,453.49 | 4,759.29 | 2,078.07 N | 24.04 E | 131,701.23 | 2,030,865.11 | 1.78 | 2,078.21 | |
| 6,675.00 | 88.92 | 359.72 | 3,454.08 | 4,759.88 | 2,173.07 N | 24.21 E | 131,796.22 | 2,030,865.17 | 1.73 | 2,173.20 | |
| 6,770.00 | 88.74 | 357.16 | 3,456.02 | 4,761.82 | 2,268.01 N | 21.63 E | 131,891.15 | 2,030,862.48 | 2.70 | 2,268.11 | |
| 6,865.00 | 88.24 | 356.88 | 3,458.52 | 4,764.32 | 2,362.84 N | 16.69 E | 131,985.99 | 2,030,857.43 | 0.60 | 2,362.89 | |
| 6,959.00 | 89.35 | 356.01 | 3,460.50 | 4,766.30 | 2,456.64 N | 10.86 E | 132,079.78 | 2,030,851.50 | 1.50 | 2,456.63 | |
| 7,054.00 | 90.68 | 356.69 | 3,460.48 | 4,766.28 | 2,551.45 N | 4.82 E | 132,174.57 | 2,030,845.35 | 1.57 | 2,551.37 | |
| 7,149.00 | 91.14 | 359.60 | 3,458.97 | 4,764.77 | 2,646.37 N | 1.74 E | 132,269.50 | 2,030,842.16 | 3.10 | 2,646.26 | |
| 7,244.00 | 91.51 | 0.17 | 3,456.77 | 4,762.57 | 2,741.35 N | 1.55 E | 132,364.47 | 2,030,841.87 | 0.72 | 2,741.23 | |
| 7,339.00 | 90.83 | 1.86 | 3,454.83 | 4,760.63 | 2,836.31 N | 3.23 E | 132,459.43 | 2,030,843.44 | 1.92 | 2,836.20 | |
| 7,434.00 | 90.46 | 0.33 | 3,453.76 | 4,759.56 | 2,931.28 N | 5.05 E | 132,554.41 | 2,030,845.15 | 1.66 | 2,931.19 | |
| 7,529.00 | 89.41 | 3.00 | 3,453.87 | 4,759.67 | 3,026.23 N | 7.81 E | 132,649.36 | 2,030,847.80 | 3.02 | 3,026.16 | |
| 7,624.00 | 89.57 | 2.51 | 3,454.71 | 4,760.51 | 3,121.12 N | 12.38 E | 132,744.25 | 2,030,852.26 | 0.54 | 3,121.09 | |



Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | TVD below System (ft) | Vertical Depth (ft) | Local Coordinates (ft) | | Map Coordinates (ft) | | Dogleg Rate (°/100ft) | Vertical Section (ft) | Comments |
|---------------------|-----------------|-------------|-----------------------|---------------------|------------------------|---------|----------------------|--------------|-----------------------|-----------------------|-------------------------|
| | | | | | Northing | Easting | Northing | Easting | | | |
| 7,719.00 | 89.66 | 1.62 | 3,455.35 | 4,761.15 | 3,216.05 N | 15.80 E | 132,839.19 | 2,030,855.57 | 0.94 | 3,216.05 | |
| 7,814.00 | 89.23 | 1.00 | 3,456.27 | 4,762.07 | 3,311.02 N | 17.97 E | 132,934.16 | 2,030,857.64 | 0.79 | 3,311.04 | |
| 7,909.00 | 88.31 | 358.92 | 3,458.31 | 4,764.11 | 3,405.99 N | 17.90 E | 133,029.14 | 2,030,857.47 | 2.39 | 3,406.00 | |
| 8,003.00 | 88.95 | 0.45 | 3,460.56 | 4,766.36 | 3,499.96 N | 17.39 E | 133,123.10 | 2,030,856.84 | 1.76 | 3,499.96 | |
| 8,098.00 | 90.18 | 359.11 | 3,461.28 | 4,767.08 | 3,594.96 N | 17.02 E | 133,218.10 | 2,030,856.37 | 1.91 | 3,594.95 | |
| 8,193.00 | 91.07 | 359.93 | 3,460.25 | 4,766.05 | 3,689.95 N | 16.23 E | 133,313.08 | 2,030,855.47 | 1.27 | 3,689.92 | |
| 8,288.00 | 91.69 | 2.54 | 3,457.96 | 4,763.76 | 3,784.89 N | 18.27 E | 133,408.03 | 2,030,857.41 | 2.82 | 3,784.88 | |
| 8,383.00 | 91.33 | 0.88 | 3,455.45 | 4,761.25 | 3,879.81 N | 21.11 E | 133,502.95 | 2,030,860.13 | 1.79 | 3,879.83 | |
| 8,478.00 | 91.79 | 1.23 | 3,452.87 | 4,758.67 | 3,974.76 N | 22.86 E | 133,597.90 | 2,030,861.77 | 0.61 | 3,974.79 | |
| 8,573.00 | 90.15 | 3.69 | 3,451.26 | 4,757.06 | 4,069.64 N | 26.93 E | 133,692.79 | 2,030,865.74 | 3.11 | 4,069.71 | |
| 8,667.00 | 89.51 | 3.83 | 3,451.54 | 4,757.34 | 4,163.44 N | 33.10 E | 133,786.60 | 2,030,871.80 | 0.70 | 4,163.56 | |
| 8,762.00 | 91.91 | 4.44 | 3,450.36 | 4,756.16 | 4,258.18 N | 39.95 E | 133,881.34 | 2,030,878.54 | 2.61 | 4,258.37 | |
| 8,857.00 | 91.72 | 1.39 | 3,447.35 | 4,753.15 | 4,353.00 N | 44.77 E | 133,976.17 | 2,030,883.26 | 3.22 | 4,353.23 | |
| 8,952.00 | 89.01 | 1.21 | 3,446.75 | 4,752.55 | 4,447.96 N | 46.93 E | 134,071.13 | 2,030,885.31 | 2.86 | 4,448.21 | |
| 8,997.00 | 88.31 | 2.03 | 3,447.80 | 4,753.60 | 4,492.93 N | 48.20 E | 134,116.10 | 2,030,886.53 | 2.40 | 4,493.19 | Final Sperry MWD Survey |
| 9,052.00 | 88.31 | 2.03 | 3,449.42 | 4,755.22 | 4,547.87 N | 50.15 E | 134,171.05 | 2,030,888.42 | 0.00 | 4,548.15 | Projection to TD |

Design Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates (ft) | | Comment |
|---------------------|---------------------|------------------------|-------|-------------------------|
| | | +N/-S | +E/-W | |
| 100.00 | 100.00 | 0.01 | 0.11 | First Gyro Survey |
| 745.00 | 745.00 | 0.30 | 1.42 | Final Gyro Survey |
| 900.00 | 900.00 | 0.59 | 1.83 | First Sperry MWD Survey |
| 8,997.00 | 4,753.60 | 4,492.93 | 48.20 | Final Sperry MWD Survey |
| 9,052.00 | 4,755.22 | 4,547.87 | 50.15 | Projection to TD |

Vertical Section Information

| Angle Type | Target | Azimuth (°) | Origin Type | Origin +N/_S (ft) | Origin +E/-W (ft) | Start TVD (ft) |
|------------|----------------------|-------------|-------------|-------------------|-------------------|----------------|
| User | No Target (Freehand) | 0.57 | Slot | 0.00 | 0.00 | 0.00 |

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|-----------|---------|------------------|-------------|
| 100.00 | 745.00 | VES Gyro Surveys | NS-Gyro-MS |

Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|--------------|------------|--------------------|-------------|
| 900.00 | 9,052.00 | Sperry MWD Surveys | MWD+SC |

Design Targets

| Target Name | Dip Angle | Dip Dir. | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|-------------------|--------------|-------------|-----|-------|-------|----------|---------|----------|-----------|
| - hit/miss target | () | () | () | () | () | () | () | | |
| - Shape | | | | | | | | | |

Directional Difficulty Index

| | | | |
|-------------------------------------|--------------|-------------------------------|------------------------------|
| Average Dogleg over Survey: | 1.79 °/100ft | Maximum Dogleg over Survey: | 16.39 °/100ft at 4,902.00 ft |
| Net Tortousity applicable to Plans: | 0.62 °/100ft | Directional Difficulty Index: | 6.148 |

Audit Info

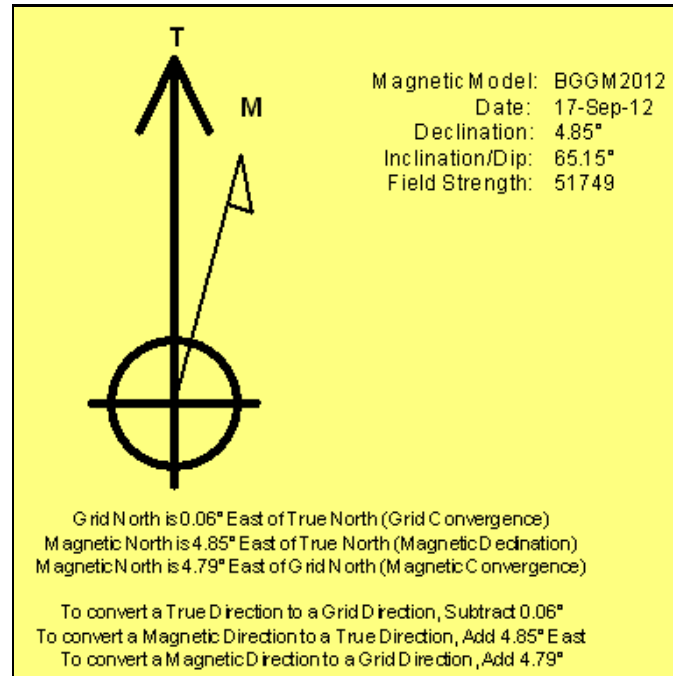
North Reference Sheet for Sec 04-T35S-R10W - Schupbach Ranch 3510 3-1H - Wellbore #1

All data is in Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.
 Vertical Depths are relative to well @ 1305.80ft (Original Well Elev). Northing and Easting are relative to Schupbach Ranch 3510 3-1H
 Coordinate System is US State Plane 1927 (Exact solution), Kansas South 1502 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866
 Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is 98° 30' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:37° 16' 0.000 N°
 False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 1.00005693

Grid Coordinates of Well: 129,623.13 ft N, 2,030,843.42 ft E
 Geographical Coordinates of Well: 37° 01' 21.39" N, 098° 23' 39.70" W
 Grid Convergence at Surface is: 0.06°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,052.00ft
 the Bottom Hole Displacement is 4,548.15ft in the Direction of 0.63° (True).

Magnetic Convergence at surface is: -4.79° (17 September 2012, , BGGM2012)



T35S, R10W, 6th P.M.

SGOMI

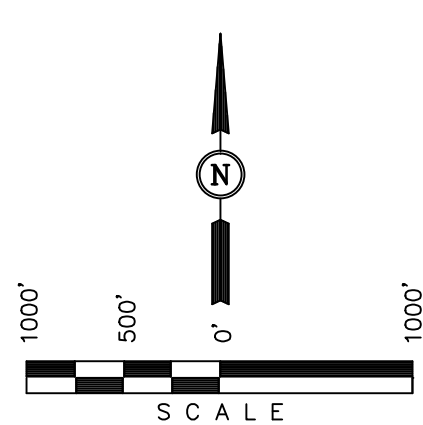
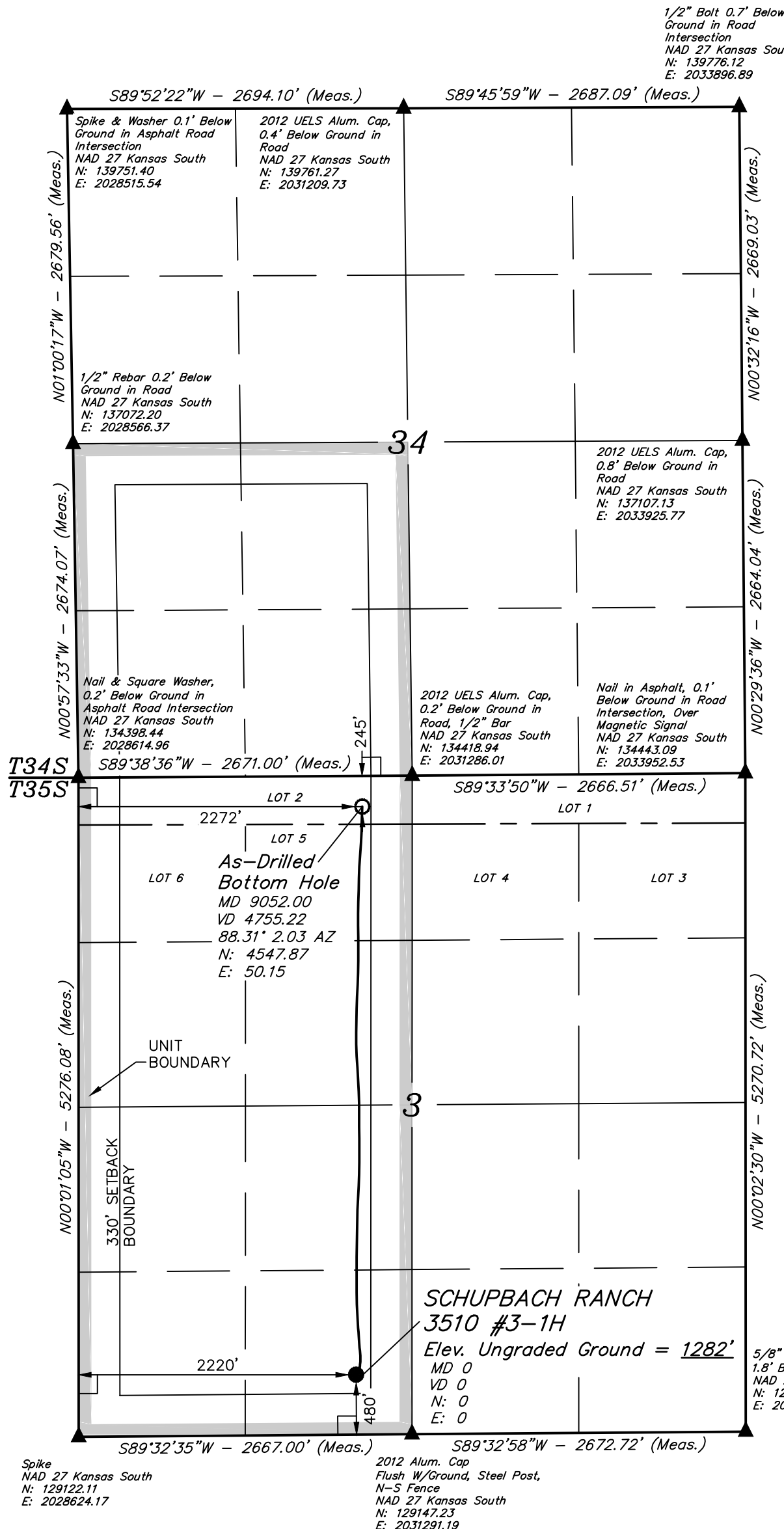
Well location, SCHUPBACH RANCH 3510 #3-1H, located as shown in the SE 1/4 SW 1/4 of Section 3, T35S, R10W, 6th P.M., Barber County, Kansas.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 12, T35S, R10W, 6th P.M. TAKEN FROM THE CORWIN, QUADRANGLE, KANSAS, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 1274 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



- LEGEND:**
- └─┘ = 90° SYMBOL
 - = PROPOSED WELL HEAD.
 - ▲ = SECTION CORNERS LOCATED.

CERTIFICATE
 THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Justin S. ...
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 1451
 STATE OF KANSAS

| | | |
|--|----------------------------|-------------------------|
| UINTAH ENGINEERING & LAND SURVEYING | | |
| 85 SOUTH 200 EAST - VERNAL, UTAH 84078 | | |
| (435) 789-1017 | | |
| SCALE 1" = 1000' | DATE SURVEYED: 10-18-12 | DATE DRAWN: 01-22-13 |
| PARTY J.P. B.L. C.A.G. | REFERENCES G.L.O. PLAT | |
| WEATHER HOT | FILE SGOMI | |

| | |
|---|---|
| NAD 83 (#3-1H AS-DRILLED BOTTOM HOLE) LATITUDE = 37°02'06.45" (37.035125) LONGITUDE = 98°23'40.36" (98.394544) | NAD 83 (#3-1H SURFACE LOCATION) LATITUDE = 37°01'21.48" (37.022633) LONGITUDE = 98°23'40.96" (98.394711) |
| NAD 27 (#3-1H AS-DRILLED BOTTOM HOLE) LATITUDE = 37°02'06.35" (37.035097) LONGITUDE = 98°23'39.10" (98.394194) | NAD 27 (#3-1H SURFACE LOCATION) LATITUDE = 37°01'21.39" (37.022608) LONGITUDE = 98°23'39.70" (98.394361) |
| STATE PLANE NAD 27 (KANSAS SOUTH) N: 134171.30 E: 2030887.05 | STATE PLANE NAD 27 (KANSAS SOUTH) N: 129623.13 E: 2030843.42 |

Summary of Changes

Lease Name and Number: Schupbach Ranch 3510 3-1H

API/Permit #: 15-007-23929-01-00

Doc ID: 1110503

Correction Number: 1

Approved By: NAOMI JAMES

| Field Name | Previous Value | New Value |
|--|-------------------|------------|
| Amount of Surface Pipe Set and Cemented at | 0 | 799 |
| Approved Date | 10/23/2012 | 01/29/2013 |
| CasingAdd_Type_PctPDF_1 | 15% Fly Ash | Attached |
| CasingNumbSacksUsedPDF_1 | 42 | Attached |
| CasingPurposeOfStringPDF_1 | Conductor | Attached |
| CasingSettingDepthPDF_1 | 60 | Attached |
| CasingSizeCasingSetPDF_1 | 18 | Attached |
| CasingSizeHoleDrilledPDF_1 | 26 | Attached |
| CasingTypeOfCementPDF_1 | 1/2 Portland Cmt. | Attached |
| CasingWeightPDF_1 | 47.76 | Attached |

Summary of changes for correction 1 continued

| Field Name | Previous Value | New Value |
|---|----------------|--------------|
| Completion Or Recompletion Date | 09/20/2012 | 12/18/2012 |
| Date Reached TD | 09/20/2012 | 10/12/2012 |
| Electric Log Run? | No | Yes |
| Electric Log Submitted Electronically? | | Yes |
| Elogs_PDF | | Triple Combo |
| Formation Top Source - Log | No | Yes |
| Liner Run? | | Yes |
| Method Of Completion - Perf | No | Yes |
| Perf_Depth_1 | | Attached |
| Perf_Material_1 | | Attached |
| Perf_Record_1 | | Attached |
| Perf_Shots_1 | | Attached |
| Producing Formation | CONDUCTOR ONLY | Mississippi |

Summary of changes for correction 1 continued

| Field Name | Previous Value | New Value |
|------------------------|---|---|
| Production Interval #1 | | 5148 - 8923' |
| Purchaser's Name | CONDUCTOR ONLY | |
| Save Link | ../../../../kcc/detail/operatorEditDetail.cfm?docID=1097866 | ../../../../kcc/detail/operatorEditDetail.cfm?docID=1110503 |
| Spot Description | CONDUCTOR ONLY | |
| TopsDepth1 | | 4072 |
| TopsDepth2 | | 4239 |
| TopsDepth3 | | 4430 |
| TopsDepth4 | | 4501 |
| TopsDepth5 | | 4613 |
| TopsDepth6 | | 4678 |
| TopsDepth7 | | 4857 |
| TopsName1 | CONDUCTOR ONLY | Stalnaker Base |
| TopsName2 | | Iola |

Summary of changes for correction 1 continued

| Field Name | Previous Value | New Value |
|------------------------|----------------|---------------|
| TopsName3 | | Hushpuckney |
| TopsName4 | | Marmaton |
| TopsName5 | | Pawnee |
| TopsName6 | | Cherokee |
| TopsName7 | | Mississippi |
| Total Depth | 60 | 9052 |
| Tubing Packer At | | N/A |
| Tubing Record - Set At | | 4028 |
| Tubing Size | | 2.875 |
| Wellsite Geologist | Earl Manning | Michael Duerr |

Summary of Attachments

Lease Name and Number: Schupbach Ranch 3510 3-1H

API: 15-007-23929-01-00

Doc ID: 1110503

Correction Number: 1

Attachment Name

SCHUBACH RANCH 3510 #3-1H Conductor record

SCHUBACH RANCH 3510 #3-1H Surface cement

SCHUBACH RANCH 3510 #3-1H Intermediate cement

SCHUBACH RANCH 3510 #3-1H Liner cement

Schupbach Ranch 3510 3-1H Final Survey

SCHUPBACH RANCH 3510 #3-1H-AS-DRILLED



CONFIDENTIAL

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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- 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

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total 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

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