Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1098303

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 # 34574
Name: Shell Gulf of Mexico Inc.
Address 1: 150 N DAIRY-ASHFORD (77079)
Address 2: PO BOX 576 (77001-0576)
City: HOUSTON State: TX Zip: 77001 + 0576
Contact Person: Damonica Pierson
Phone: (832) 337-2172
CONTRACTOR: License # 34718
Name: Nabors Drilling USA, LP
Wellsite Geologist: Michael Duerr
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 #:

08/19/2012 — Spud Date or Recompletion Date
09/19/2012 — Date Reached TD
11/03/2012 — Completion Date or Recompletion Date

API No. 15 - 15-007-23853-01-00
Spot Description:
NE - NE - NE - NW Sec. 4 Twp. 35 S. R. 10 ☐ East ☑ West
310 Feet from ☑ North / ☐ South Line of Section
2333 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Barber
Lease Name: Schupbach 3510 Well #: 4-1H
Field Name: Wildcat
Producing Formation: Mississippi
Elevation: Ground: 1309 Kelly Bushing: 1332
Total Vertical Depth: 9880 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 753 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: 0 ppm Fluid volume: 0 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Plumb Thicket Landfill
Lease Name: N/A License #: 99999
Quarter SW Sec. 4 Twp. 31 S. R. 6 ☐ East ☑ West
County: Harper Permit #: KDHE Permit # 0842

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: 11/07/2012
☑ **Confidential Release Date:** 11/07/2014
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 11/08/2012

1098303

Operator Name: Shell Gulf of Mexico Inc. Lease Name: Schupbach 3510 Well #: 4-1H

Sec. 4 Twp. 35 S. R. 10 ☐ East ☑ West County: Barber

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

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

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

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Triple Combo

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

Name	Top	Datum
Hushpuckney	4447	
Marmaton	4521	
Pawnee	4632	
Cherokee	4703	
Mississippi	4882	

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

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

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

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

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

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:
	2.875	4212	N/A	☑ 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:
☐ Vented ☑ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

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

PRODUCTION INTERVAL:
5379' - 9752'

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

Form	ACO1 - Well Completion
Operator	Shell Gulf of Mexico Inc.
Well Name	Schupbach 3510 4-1H
Doc ID	1098303

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
6	5379' - 5612'	184842 gals fluid, 100834# proppant	
6	5687' - 5997'	161112 gals fluid, 81412# proppant	
6	6072' - 6386'	163464 gals fluid, 76933# proppant	
6	6468' - 6982'	155172 gals fluid, 68968# proppant	
6	7111' - 7477'	158634 gals fluid, 71438# proppant	
6	7566' - 7932'	157836 gals fluid, 71996# proppant	
6	8021' - 8387'	134106 gals fluid, 73768# proppant	
6	8476' - 8842'	289 gals fluid, 5059# proppant	
6	8931' - 9297'	172620 gals fluid, 75585# proppant	
6	9386' - 9752'	165564 gals fluid, 75126# proppant	

Form	ACO1 - Well Completion
Operator	Shell Gulf of Mexico Inc.
Well Name	Schupbach 3510 4-1H
Doc ID	1098303

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.	36	15% Fly Ash
Surface	12.25	9.625	36	753	Class C	500	See attached
Intermediate	8.75	7	23	5190	Class C	990	See attached
Liner	6.125	4.5	11.6	9912	Class H	450	See attached

SHELL GULF OF MEXICO, INC. (34574)	Schupbach 3510-4	
PETE MARTIN DRILLING (34645) (SET THE CONDUCTOR)	1-H Conductor	1-H Mouse Hole
Call in DATE OF SPUD	5/4/2012	
spud in date	5/7/2012	5/10/2012
T.D date	5/7/2012	5/10/2012
Size Hole Drilled	26"	20"
Size Casing Set (in O.D)	18"	14"
conductor wall thickness	250	188
Weight Lbs./Ft.	47.76	27.76
Setting Depth	60'	79'
Type of Cement	type 1/2 portland cement	
Cubic yards of cement	6cy	6cy
2500 PSI Grout Mix	yes	yes
Type and Percent of Additives	15% fly ash	15% fly ash
Comments	0-8' dirt 8'-15'clay/dirt mix 15'-36' sand 36'-60' clay water@24'	0-8' dirt 8'-15 clay 15'-35' sand 35'-60' clay 70'-77' sand water@24/

CEMENT JOB REPORT

CUSTOMER	DATE	F.R. #	SERV. SUPV.
SHELL WESTERN E & P INC	20-AUG-12	1001929665	JONATHAN M SCHULZ III
LEASE & WELL NAME	**LOCATION**		**COUNTY-PARISH-BLOCK**
SCHUPBACH 3510 #4-1H - API 15007238530000	4-35S-10W		Barber Kansas
DISTRICT	**DRILLING CONTRACTOR RIG #**		**TYPE OF JOB**
McAlester			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
water			8.34				70	
C + .25pps Celloflake + 2% CaCl2		500	14.8	1.35	6.34	02:45	132	82.87
Water			8.34				54.75	

Available Mix Water 1000 **Bbl.** **Available Displ. Fluid** 890 **Bbl.** **TOTAL** 256.75 82.87

HOLE SIZE	% EXCESS	DEPTH	TBG-CSG-D.P. ID	OD	WGT.	TYPE	MD	TVD	GRADE	COLLAR DEPTHS SHOE	FLOAT	STAGE
12.25		753	8.921	9.625	36	CSG	753	753	K-55			

LAST CASING ID	OD	WGT	TYPE	MD	TVD	PKR-CMT RET-BR PL-LINER BRAND & TYPE	DEPTH	PERF. DEPTH TOP	BTM	TOP CONN SIZE	THREAD	WELL FLUID TYPE	WGT.
17.	18	84		60	60					9.625	8RD	WATER BASED MU	8.45

DISPL. VOLUME VOLUME	UOM	DISPL. FLUID TYPE	WGT.	CAL. PSI BUMP PLUG	CAL. MAX PSI TO REV.	OP. MAX SQ. PSI	MAX TBG PSI RATED	Operator	MAX CSG PSI RATED	Operator	MIX WATER
54.6	BBLS	Water	8.34	241					2816	1200	frac tank

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: Arrive on location , laying down BHA, running casing

PRESSURE/RATE DETAIL TIME HR:MIN.	PRESSURE - PSI PIPE	ANNULUS	RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	EXPLANATION
						SAFETY MEETING: BJ CREW [X] CO. REP. [X]
						TEST LINES 2889 PSI
						CIRCULATING WELL - RIG [X] BJ [ ]
01:57						Test pumps & lines
01:59	190				WATER	open well/start water ahead
02:07	192		5	51	WATER	shutdown/cant get product/ shutdown/ fix
02:15						Turn well over to rig to circulate
03:55	2889				WATER	re-pressure test lines
03:56	203		5		WATER	open well/start water ahead1
04:05	164		3	18	WATER	end water ahead/ start slurry @ 14.8ppg
04:27	498		5	111	SLURRY	bbls pumped when cement to surface
04:30	466		2	132	SLURRY	end slurry shutdown
04:36	162		3		WATER	drop Weatherford TRP/start displacement
04:49	294		2	50	WATR	bbls pumped/ slow rate to bump
04:50	923		2	54.75	WATR	bump plug shutdown/ monitor
05:10	0			-.125	WATER	test float/ holding/ bbls return monitor
05:25	0					floats holding/ rig down
						76 bbls cement return to surface
						316 sacks return to surface
						Thanks for using Baker Hughes Pressure pumpng

BUMPED PLUG Y / N	PSI TO BUMP PLUG	TEST FLOAT EQUIP. Y / N	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT Y / N	SERVICE SUPERVISOR SIGNATURE:
[Y] / N	910	[Y] / N	76	256	0	Y / [N]	

CEMENT JOB REPORT

CUSTOMER SHELL WESTERN E & P INC	**DATE** 09-SEP-12	**F.R. #** 1001933384	**SERV. SUPV.** JUSTIN D STAMPER
LEASE & WELL NAME SCHUPBACH 3510 #4-1H - API 15007238530000	**LOCATION** 4-35S-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	Shoe 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
SEAL BOND			8.45				40	
15:85:8(POZ,C,GEL)+10%SALT+.5%SMS+4PPS KOLS		790	12.4	2.45	13.51	04:37	344	253.59
50:50:2(POZ,C,GEL)+4#KOLSL+.15%SMS+.3%FL52		200	14.2	1.32	5.56	03:58	47	26.47
WATER			8.34				203	

Available Mix Water 1000 **Bbl.** **Available Displ. Fluid** 1000 **Bbl.** **TOTAL** 634 280.06

HOLE SIZE	HOLE % EXCESS	HOLE DEPTH	TBG-CSG-D.P. ID	OD	WGT.	TYPE	MD	TVD	GRADE	COLLAR DEPTHS SHOE	FLOAT	STAGE
8.75		5216	6.366	7	23	CSG	5190	4768	L-80	5190	5145	

LAST CASING ID	OD	WGT	TYPE	MD	TVD	PKR-CMT RET-BR PL-LINER BRAND & TYPE	DEPTH	PERF. DEPTH TOP	BTM	TOP CONN SIZE	THREAD	WELL FLUID TYPE	WGT.
8.9	9.625	36		800	800			4600	4600	7	8RD	WATER BASED MU	9

DISPL. VOLUME VOLUME	UOM	DISPL. FLUID TYPE	WGT.	CAL. PSI BUMP PLUG	CAL. MAX PSI TO REV.	OP. MAX SQ. PSI	MAX TBG PSI RATED	Operator	MAX CSG PSI RATED	Operator	MIX WATER
203	BBLS	WATER	8.34	1500					5072	3500	FRAC TANK

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

PRESSURE/RATE DETAIL TIME HR:MIN.	PRESSURE - PSI PIPE	ANNULUS	RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	EXPLANATION
						SAFETY MEETING: BJ CREW [X] CO. REP. [X]
						TEST LINES 4200 PSI
						CIRCULATING WELL - RIG [X] BJ [ ]
12:00						ARRIVE ON LOCATION
14:00						SAFETY MEETING
14:55	4200					TEST LINES, START LEAD SLURRY, SEAL BON PUMPED BY RIG
16:09	300		4.8	344	LEAD	FINISH LEAD, START TAIL
16:25	100		3	47	TAIL	FINISH TAIL, DROP PLUG PLUG AND START DISPLACMENT
17:00	1000		4	135	WATER	SLOW DOWN PER COMPANY MAN
17:11	1300		3.5	175	WATER	SLOW DOWN PER COMPANY MAN
17:19	1400		3	195	WATER	SLOW DOWN PER COMPANY MAN
17:24	1300		2	204	WATER	BUMP PLUG PRESSURE UP TO 2400 PSI
17:55	0				WATER	BLEED OFF RECIVED 2 BBLS BACK TO TRUCK
						FLOATS 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:
[Y] N	2400	[Y] N	180	595	0	Y [N]	

CEMENT JOB REPORT

CUSTOMER	DATE	F.R. #	SERV. SUPV.
SHELL WESTERN E & P INC	22-SEP-12	1001935741	JUSTIN D STAMPER
LEASE & WELL NAME	**LOCATION**		**COUNTY-PARISH-BLOCK**
SCHUPBACH 3510 #4-1H - API 15007238530000	4-35S-10W		Barber Kansas
DISTRICT	**DRILLING CONTRACTOR RIG #**		**TYPE OF JOB**
McAlester			Liner

SIZE & TYPE OF PLUGS	LIST-CSG-HARDWARE	MECHANICAL BARRIERS	MD	TVD	HANGER TYPES	MD	TVD
	Shoe 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
SealBond Spacer			8.45				40	
50:50(POZ,H)+3%SALT+1%R-3+.5%FL62+.6%SMS+.5		450	14.3	1.24	5.54	04:45	99.67	59.31
Displacement			8.34				127	

Available Mix Water 1000 **Bbl.** **Available Displ. Fluid** 1000 **Bbl.** **TOTAL** 266.67 59.31

HOLE SIZE	HOLE % EXCESS	HOLE DEPTH	TBG-CSG-D.P. ID	OD	WGT.	TYPE	MD	TVD	GRADE	COLLAR DEPTHS SHOE	FLOAT	STAGE
6.125		9880	4	4.5	11.6	CSG	9912	4739	P-110	9865	9778	
			3.34	4	14	DP	4512	4521	D			

LAST CASING ID	OD	WGT	TYPE	MD	TVD	PKR-CMT RET-BR PL-LINER BRAND & TYPE	DEPTH	PERF. DEPTH TOP	BTM	TOP CONN SIZE	THREAD	WELL FLUID TYPE	WGT.
6.4	7	23		5074	5074					2	1502	WATER BASED MU	8.4

DISPL. VOLUME VOLUME	UOM	DISPL. FLUID TYPE	WGT.	CAL. PSI BUMP PLUG	CAL. MAX PSI TO REV.	OP. MAX SQ. PSI	MAX TBG PSI RATED	Operator	MAX CSG PSI RATED	Operator	MIX WATER
127	BBLS	Displacement	8.34	2000					8552	5500	RIG

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

PRESSURE/RATE DETAIL TIME HR:MIN.	PRESSURE - PSI PIPE	ANNULUS	RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	EXPLANATION
						SAFETY MEETING: BJ CREW [X] CO. REP. [X]
						TEST LINES 7200 PSI
						CIRCULATING WELL - RIG [X] BJ [ ]
13:00						ARRIVE ON LOCATION
20:00						SAFETY MEETING
20:48	7000				WATER	PRESSURE TEST LINES, RIG TO PUMP SPACER, START SLURRY
21:19	300		4	99	SLURRY	FINISH SLURRY, WASH LINES, DROP PLUG AND DISPLACE
21:56	500		4	117	WATER	SLOW TO BUMP PLUG
22:04	300		3	10	WATER	BUMP PLUG PRESSURE TO 4500 PSI
22:08	0					BLEED OFF RECIVED 2 BBLS BACK TO TRUCK
						FLOATS HOLDING
22:19	1500			1	WATER	PRESSURE TO 1500 TO TEST LINER
10:40						START REVERSE OUT
11:10	500		6	150	WATER	REVERSE OUT
						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:
[Y] N	4500	[Y] N	0	376	0	Y [N]	

Shell Exploration & Production Co. Inc.

Barber Co. KS (NAD-27)
Sec 04-T35S-R10W
Schupbach 3510 #4-1H / Job #9504797 / Nabors 180
API 15-007-23853-01-00
Wellbore #1

Survey: MWD Surveys

Sperry Drilling Services

Combo Report

21 September, 2012

Surface UWI : API 15-007-23853-01-00

Well Coordinates: 134,055.00 N, 2,025,611.76 E (37° 02' 05.26" N, 098° 24' 44.15" W)
Ground Level: 1,309.00 ft

Local Coordinate Origin:	Centered on Well Schupbach 3510 #4-1H / Job #9504797 / Nabors 180
Viewing Datum:	WELL @ 1332.80ft (Original Well Elev)
TVDs to System:	N
North Reference:	True
Unit System:	API US Survey Feet

Version: 2003.21 Build: 43

HALLIBURTON

Survey Report for Schupbach 3510 #4-1H / Job #9504797 / Nabors 180 - MWD Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates Northing (ft)	Local Coordinates Easting (ft)	Map Coordinates Northing (ft)	Map Coordinates Easting (ft)	Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
0.00	0.00	0.00	-1,332.80	0.00	0.00 N	0.00 E	134,055.00	2,025,611.76	0.00	0.00	
80.00	0.31	239.54	-1,252.80	80.00	0.11 S	0.19 W	134,054.89	2,025,611.57	0.39	-0.09	First Sperry MWD Survey
142.00	0.51	111.31	-1,190.80	142.00	0.30 S	0.07 W	134,054.70	2,025,611.69	1.20	-0.29	
172.00	0.64	87.19	-1,160.80	172.00	0.34 S	0.22 E	134,054.66	2,025,611.98	0.91	-0.36	
202.00	0.86	43.88	-1,130.81	201.99	0.16 S	0.54 E	134,054.84	2,025,612.30	1.97	-0.22	
234.00	1.41	21.30	-1,098.81	233.99	0.38 N	0.85 E	134,055.38	2,025,612.61	2.18	0.28	
269.00	2.25	2.08	-1,063.83	268.97	1.46 N	1.03 E	134,056.46	2,025,612.79	2.94	1.34	
300.00	3.38	358.41	-1,032.87	299.93	2.98 N	1.03 E	134,057.99	2,025,612.79	3.69	2.85	
331.00	4.33	353.54	-1,001.94	330.86	5.06 N	0.87 E	134,060.06	2,025,612.63	3.24	4.94	
362.00	4.92	352.41	-971.04	361.76	7.54 N	0.56 E	134,062.54	2,025,612.32	1.93	7.44	
394.00	5.30	351.83	-939.17	393.63	10.36 N	0.17 E	134,065.36	2,025,611.92	1.20	10.28	
425.00	5.84	348.62	-908.31	424.49	13.33 N	0.34 W	134,068.33	2,025,611.41	2.01	13.29	
456.00	6.31	345.58	-877.49	455.31	16.52 N	1.08 W	134,071.52	2,025,610.67	1.84	16.54	
488.00	6.39	345.19	-845.68	487.12	19.95 N	1.97 W	134,074.95	2,025,609.77	0.28	20.04	
519.00	6.43	344.50	-814.88	517.92	23.29 N	2.87 W	134,078.29	2,025,608.86	0.28	23.46	
613.00	5.78	351.18	-721.41	611.39	33.04 N	5.01 W	134,088.03	2,025,606.72	1.02	33.39	
706.00	5.42	351.34	-628.85	703.95	42.01 N	6.39 W	134,097.00	2,025,605.33	0.39	42.45	
733.00	5.25	351.70	-601.97	730.83	44.49 N	6.76 W	134,099.49	2,025,604.96	0.64	44.96	
804.00	4.59	358.74	-531.23	801.57	50.55 N	7.29 W	134,105.54	2,025,604.42	1.26	51.04	
835.00	4.42	0.33	-500.33	832.47	52.98 N	7.31 W	134,107.97	2,025,604.40	0.68	53.46	
866.00	3.82	0.51	-469.41	863.39	55.21 N	7.29 W	134,110.20	2,025,604.42	1.94	55.67	
897.00	2.68	359.26	-438.46	894.34	56.97 N	7.29 W	134,111.96	2,025,604.41	3.68	57.42	
991.00	0.90	354.84	-344.51	988.29	59.90 N	7.39 W	134,114.89	2,025,604.32	1.90	60.35	
1,084.00	0.79	356.59	-251.52	1,081.28	61.27 N	7.49 W	134,116.26	2,025,604.21	0.12	61.72	
1,178.00	0.61	356.34	-157.52	1,175.28	62.41 N	7.56 W	134,117.40	2,025,604.14	0.19	62.86	
1,272.00	0.43	341.59	-63.53	1,269.27	63.25 N	7.71 W	134,118.24	2,025,604.00	0.24	63.71	
1,367.00	0.52	358.57	31.47	1,364.27	64.02 N	7.83 W	134,119.01	2,025,603.87	0.17	64.49	
1,462.00	0.56	348.54	126.46	1,459.26	64.90 N	7.93 W	134,119.89	2,025,603.77	0.11	65.38	
1,557.00	0.41	356.69	221.46	1,554.26	65.70 N	8.04 W	134,120.69	2,025,603.65	0.17	66.18	
1,746.00	0.53	354.07	410.45	1,743.25	67.24 N	8.17 W	134,122.23	2,025,603.52	0.06	67.73	
1,936.00	0.56	342.18	600.45	1,933.25	69.00 N	8.55 W	134,123.99	2,025,603.15	0.06	69.52	
2,126.00	0.18	22.00	790.44	2,123.24	70.16 N	8.72 W	134,125.15	2,025,602.97	0.23	70.69	
2,315.00	0.65	313.71	979.44	2,312.24	71.17 N	9.38 W	134,126.17	2,025,602.31	0.32	71.77	
2,505.00	0.44	324.80	1,169.43	2,502.23	72.52 N	10.58 W	134,127.51	2,025,601.11	0.12	73.24	
2,694.00	0.34	334.23	1,358.42	2,691.22	73.61 N	11.25 W	134,128.60	2,025,600.45	0.06	74.40	
2,883.00	0.03	108.38	1,547.42	2,880.22	74.10 N	11.44 W	134,129.09	2,025,600.25	0.19	74.91	
3,073.00	0.67	349.08	1,737.42	3,070.22	75.18 N	11.61 W	134,130.17	2,025,600.08	0.36	75.99	
3,263.00	0.83	337.32	1,927.40	3,260.20	77.54 N	12.35 W	134,132.53	2,025,599.34	0.12	78.42	
3,452.00	0.57	13.07	2,116.39	3,449.19	79.72 N	12.66 W	134,134.71	2,025,599.02	0.26	80.62	

Survey Report for Schupbach 3510 #4-1H / Job #9504797 / Nabors 180 - MWD Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates Northing (ft)	Local Coordinates Easting (ft)	Map Coordinates Northing (ft)	Map Coordinates Easting (ft)	Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
3,642.00	0.50	347.24	2,306.38	3,639.18	81.45 N	12.63 W	134,136.43	2,025,599.05	0.13	82.34	
3,832.00	0.31	332.57	2,496.38	3,829.18	82.71 N	13.05 W	134,137.70	2,025,598.63	0.11	83.64	
4,022.00	0.22	306.56	2,686.37	4,019.17	83.38 N	13.58 W	134,138.37	2,025,598.10	0.08	84.37	
4,212.00	0.69	9.68	2,876.37	4,209.17	84.73 N	13.68 W	134,139.72	2,025,598.00	0.33	85.72	
4,243.00	3.63	2.18	2,907.34	4,240.14	85.89 N	13.61 W	134,140.88	2,025,598.07	9.51	86.87	
4,273.00	6.89	358.51	2,937.21	4,270.01	88.64 N	13.62 W	134,143.63	2,025,598.05	10.92	89.60	
4,305.00	10.02	357.88	2,968.86	4,301.66	93.35 N	13.78 W	134,148.33	2,025,597.90	9.79	94.29	
4,336.00	13.07	357.81	2,999.23	4,332.03	99.54 N	14.01 W	134,154.53	2,025,597.66	9.84	100.48	
4,368.00	16.20	357.59	3,030.19	4,362.99	107.62 N	14.34 W	134,162.61	2,025,597.32	9.78	108.54	
4,400.00	19.55	357.84	3,060.64	4,393.44	117.43 N	14.73 W	134,172.42	2,025,596.92	10.47	118.34	
4,431.00	22.58	357.74	3,089.56	4,422.36	128.57 N	15.16 W	134,183.55	2,025,596.48	9.77	129.45	
4,463.00	25.68	357.04	3,118.76	4,451.56	141.63 N	15.76 W	134,196.62	2,025,595.87	9.73	142.51	
4,495.00	28.19	356.15	3,147.29	4,480.09	156.10 N	16.62 W	134,211.09	2,025,594.99	7.94	156.98	
4,526.00	30.87	354.91	3,174.26	4,507.06	171.33 N	17.82 W	134,226.31	2,025,593.78	8.87	172.25	
4,558.00	34.30	353.73	3,201.22	4,534.02	188.48 N	19.53 W	134,243.46	2,025,592.05	10.90	189.48	
4,590.00	37.86	353.51	3,227.08	4,559.88	207.20 N	21.63 W	134,262.18	2,025,589.94	11.13	208.33	
4,621.00	41.40	353.48	3,250.95	4,583.75	226.84 N	23.87 W	134,281.82	2,025,587.68	11.42	228.09	
4,653.00	44.69	353.64	3,274.33	4,607.13	248.55 N	26.32 W	134,303.52	2,025,585.21	10.29	249.93	
4,685.00	46.93	353.89	3,296.64	4,629.44	271.35 N	28.81 W	134,326.33	2,025,582.70	7.02	272.88	
4,716.00	49.45	353.93	3,317.30	4,650.10	294.33 N	31.26 W	134,349.30	2,025,580.22	8.13	295.98	
4,748.00	52.34	353.51	3,337.48	4,670.28	319.01 N	33.98 W	134,373.97	2,025,577.48	9.09	320.81	
4,779.00	54.75	353.27	3,355.90	4,688.70	343.77 N	36.85 W	134,398.74	2,025,574.59	7.80	345.74	
4,811.00	57.48	353.82	3,373.74	4,706.54	370.17 N	39.83 W	134,425.13	2,025,571.58	8.65	372.30	
4,843.00	60.63	353.91	3,390.20	4,723.00	397.45 N	42.76 W	134,452.41	2,025,568.62	9.85	399.75	
4,874.00	62.57	354.20	3,404.94	4,737.74	424.57 N	45.59 W	134,479.53	2,025,565.77	6.31	427.01	
4,906.00	65.38	354.56	3,418.98	4,751.78	453.19 N	48.40 W	134,508.14	2,025,562.93	8.84	455.76	
4,938.00	68.50	354.08	3,431.51	4,764.31	482.48 N	51.32 W	134,537.43	2,025,559.99	9.85	485.20	
4,969.00	71.41	353.99	3,442.14	4,774.94	511.44 N	54.34 W	134,566.39	2,025,556.93	9.39	514.32	
5,001.00	74.37	354.59	3,451.55	4,784.35	541.87 N	57.39 W	134,596.82	2,025,553.87	9.42	544.90	
5,033.00	76.67	355.38	3,459.55	4,792.35	572.74 N	60.09 W	134,627.68	2,025,551.13	7.57	575.87	
5,064.00	78.74	355.67	3,466.15	4,798.95	602.93 N	62.46 W	134,657.87	2,025,548.74	6.74	606.15	
5,096.00	80.90	356.21	3,471.81	4,804.61	634.35 N	64.68 W	134,689.28	2,025,546.48	6.95	637.62	
5,128.00	83.33	356.61	3,476.20	4,809.00	665.98 N	66.67 W	134,720.91	2,025,544.46	7.69	669.28	
5,159.00	86.28	355.82	3,479.00	4,811.80	696.78 N	68.71 W	134,751.71	2,025,542.40	9.85	700.12	
5,254.00	90.40	355.94	3,481.75	4,814.55	791.47 N	75.53 W	134,846.40	2,025,535.49	4.34	794.99	
5,347.00	91.11	355.95	3,480.53	4,813.33	884.23 N	82.10 W	134,939.15	2,025,528.82	0.76	887.92	
5,440.00	89.97	355.54	3,479.65	4,812.45	976.97 N	89.00 W	135,031.88	2,025,521.84	1.30	980.85	
5,535.00	91.11	354.32	3,478.76	4,811.56	1,071.59 N	97.40 W	135,126.50	2,025,513.35	1.76	1,075.83	
5,630.00	91.87	354.62	3,476.29	4,809.09	1,166.12 N	106.55 W	135,221.01	2,025,504.11	0.86	1,170.79	

Survey Report for Schupbach 3510 #4-1H / Job #9504797 / Nabors 180 - MWD Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates Northing (ft)	Local Coordinates Easting (ft)	Map Coordinates Northing (ft)	Map Coordinates Easting (ft)	Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
5,725.00	91.67	352.83	3,473.35	4,806.15	1,260.50 N	116.93 W	135,315.39	2,025,493.65	1.90	1,265.74	
5,820.00	90.22	352.98	3,471.79	4,804.59	1,354.76 N	128.66 W	135,409.63	2,025,481.83	1.53	1,360.71	
5,915.00	90.43	352.89	3,471.25	4,804.05	1,449.03 N	140.34 W	135,503.90	2,025,470.05	0.24	1,455.70	
6,010.00	89.60	352.40	3,471.22	4,804.02	1,543.25 N	152.51 W	135,598.10	2,025,457.80	1.01	1,550.68	
6,105.00	89.97	353.24	3,471.58	4,804.38	1,637.50 N	164.38 W	135,692.34	2,025,445.84	0.97	1,645.67	
6,201.00	90.40	353.93	3,471.27	4,804.07	1,732.90 N	175.11 W	135,787.73	2,025,435.02	0.85	1,741.66	
6,295.00	90.62	353.60	3,470.43	4,803.23	1,826.34 N	185.31 W	135,881.16	2,025,424.73	0.42	1,835.66	
6,390.00	90.12	352.08	3,469.82	4,802.62	1,920.59 N	197.15 W	135,975.40	2,025,412.80	1.68	1,930.64	
6,485.00	89.38	351.51	3,470.23	4,803.03	2,014.62 N	210.71 W	136,069.42	2,025,399.15	0.98	2,025.59	
6,579.00	90.06	352.26	3,470.69	4,803.49	2,107.68 N	223.98 W	136,162.46	2,025,385.80	1.08	2,119.53	
6,674.00	90.06	351.84	3,470.59	4,803.39	2,201.76 N	237.12 W	136,256.54	2,025,372.57	0.44	2,214.49	
6,769.00	90.55	351.68	3,470.09	4,802.89	2,295.78 N	250.74 W	136,350.54	2,025,358.87	0.54	2,309.43	
6,864.00	91.08	351.75	3,468.74	4,801.54	2,389.78 N	264.42 W	136,444.53	2,025,345.09	0.56	2,404.36	
6,959.00	90.83	352.13	3,467.15	4,799.95	2,483.83 N	277.74 W	136,538.56	2,025,331.68	0.48	2,499.30	
7,054.00	90.18	353.88	3,466.31	4,799.11	2,578.11 N	289.31 W	136,632.83	2,025,320.03	1.96	2,594.29	
7,149.00	90.00	354.35	3,466.17	4,798.97	2,672.61 N	299.05 W	136,727.32	2,025,310.20	0.53	2,689.28	
7,244.00	91.48	354.82	3,464.94	4,797.74	2,767.18 N	308.01 W	136,821.88	2,025,301.14	1.63	2,784.26	
7,339.00	90.71	355.07	3,463.12	4,795.92	2,861.79 N	316.38 W	136,916.49	2,025,292.69	0.85	2,879.22	
7,434.00	89.66	354.37	3,462.82	4,795.62	2,956.38 N	325.12 W	137,011.07	2,025,283.85	1.33	2,974.21	
7,529.00	90.03	354.66	3,463.07	4,795.87	3,050.95 N	334.21 W	137,105.63	2,025,274.68	0.49	3,069.20	
7,624.00	90.77	354.35	3,462.41	4,795.21	3,145.51 N	343.30 W	137,200.18	2,025,265.50	0.84	3,164.19	
7,719.00	90.06	353.63	3,461.72	4,794.52	3,239.98 N	353.25 W	137,294.64	2,025,255.46	1.06	3,259.18	
7,814.00	89.29	353.29	3,462.26	4,795.06	3,334.36 N	364.07 W	137,389.01	2,025,244.55	0.89	3,354.18	
7,909.00	89.91	353.65	3,462.92	4,795.72	3,428.74 N	374.87 W	137,483.38	2,025,233.66	0.75	3,449.18	
8,004.00	89.35	353.01	3,463.54	4,796.34	3,523.10 N	385.91 W	137,577.73	2,025,222.54	0.90	3,544.17	
8,099.00	88.37	354.33	3,465.43	4,798.23	3,617.50 N	396.38 W	137,672.11	2,025,211.98	1.73	3,639.15	
8,193.00	90.43	353.91	3,466.41	4,799.21	3,710.99 N	406.01 W	137,765.60	2,025,202.26	2.24	3,733.14	
8,288.00	91.97	354.78	3,464.42	4,797.22	3,805.50 N	415.37 W	137,860.10	2,025,192.81	1.86	3,828.11	
8,383.00	91.39	354.13	3,461.64	4,794.44	3,900.02 N	424.54 W	137,954.61	2,025,183.55	0.92	3,923.06	
8,478.00	89.91	352.30	3,460.56	4,793.36	3,994.34 N	435.76 W	138,048.92	2,025,172.24	2.48	4,018.04	
8,573.00	90.09	352.10	3,460.56	4,793.36	4,088.46 N	448.66 W	138,143.03	2,025,159.26	0.28	4,113.01	
8,667.00	90.37	351.88	3,460.18	4,792.98	4,181.54 N	461.75 W	138,236.10	2,025,146.07	0.38	4,206.96	
8,762.00	90.40	351.60	3,459.54	4,792.34	4,275.56 N	475.40 W	138,330.10	2,025,132.34	0.30	4,301.90	
8,857.00	90.12	351.74	3,459.11	4,791.91	4,369.55 N	489.17 W	138,424.08	2,025,118.48	0.33	4,396.84	
8,952.00	89.10	351.17	3,459.76	4,792.56	4,463.49 N	503.28 W	138,518.01	2,025,104.28	1.23	4,491.76	
9,047.00	89.97	352.05	3,460.53	4,793.33	4,557.47 N	517.14 W	138,611.97	2,025,090.33	1.30	4,586.68	
9,142.00	90.74	352.25	3,459.94	4,792.74	4,651.58 N	530.12 W	138,706.07	2,025,077.27	0.84	4,681.64	
9,237.00	91.29	354.06	3,458.26	4,791.06	4,745.88 N	541.44 W	138,800.36	2,025,065.86	1.99	4,776.62	
9,332.00	87.96	352.72	3,458.88	4,791.68	4,840.23 N	552.37 W	138,894.70	2,025,054.84	3.78	4,871.60	

Survey Report for Schupbach 3510 #4-1H / Job #9504797 / Nabors 180 - MWD Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates Northing (ft)	Local Coordinates Easting (ft)	Map Coordinates Northing (ft)	Map Coordinates Easting (ft)	Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
9,427.00	88.70	353.01	3,461.65	4,794.45	4,934.46 N	564.16 W	138,988.92	2,025,042.95	0.84	4,966.55	
9,522.00	89.51	353.51	3,463.13	4,795.93	5,028.79 N	575.31 W	139,083.24	2,025,031.72	1.00	5,061.53	
9,617.00	89.63	353.37	3,463.85	4,796.65	5,123.16 N	586.17 W	139,177.60	2,025,020.78	0.19	5,156.53	
9,712.00	89.57	352.48	3,464.51	4,797.31	5,217.44 N	597.87 W	139,271.86	2,025,008.99	0.94	5,251.51	
9,807.00	91.60	353.27	3,463.54	4,796.34	5,311.69 N	609.65 W	139,366.11	2,024,997.12	2.29	5,346.49	Final Sperry MWD Survey
9,880.00	91.60	353.27	3,461.50	4,794.30	5,384.16 N	618.20 W	139,438.57	2,024,988.50	0.00	5,419.46	Projection To TD

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
80.00	80.00	-0.11	-0.19	First Sperry MWD Survey
9,807.00	4,796.34	5,311.69	-609.65	Final Sperry MWD Survey
9,880.00	4,794.30	5,384.16	-618.20	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)	353.75	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
80.00	9,880.00	MWD Surveys	MWD+SC

Design Targets

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

Survey Report for Schupbach 3510 #4-1H / Job #9504797 / Nabors 180 - MWD Surveys

Directional Difficulty Index

Average Dogleg over Survey:	1.63 °/100ft	Maximum Dogleg over Survey:	11.42 °/100ft at 4,621.00 ft
Net Tortousity applicable to Plans:	0.09 °/100ft	Directional Difficulty Index:	6.254

Audit Info

North Reference Sheet for Sec 04-T35S-R10W - Schupbach 3510 #4-1H / Job #9504797 / Nabors 180 - 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 @ 1332.80ft (Original Well Elev). Northing and Easting are relative to Schupbach 3510 #4-1H / Job #9504797 / Nabors 180

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: 1.00005366

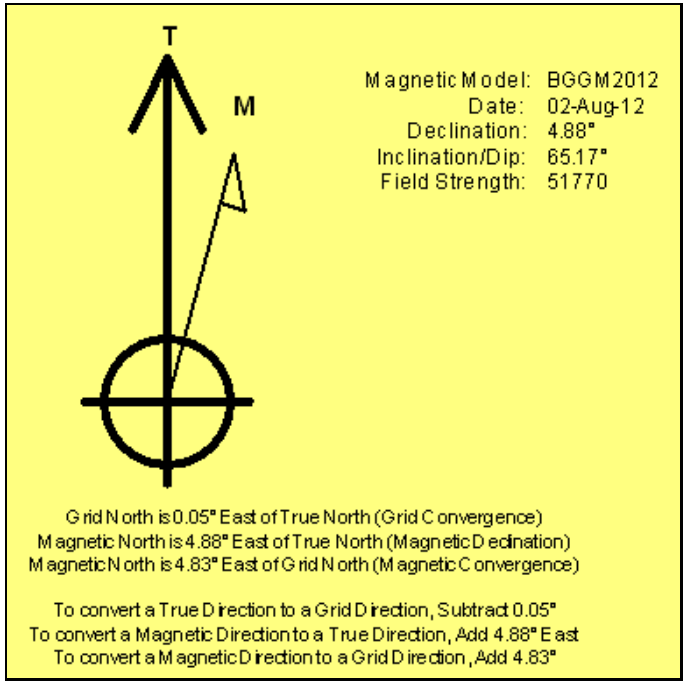
Grid Coordinates of Well: 134,055.00 ft N, 2,025,611.76 ft E

Geographical Coordinates of Well: 37° 02' 05.26" N, 098° 24' 44.15" W

Grid Convergence at Surface is: 0.05°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,880.00ft
the Bottom Hole Displacement is 5,419.54ft in the Direction of 353.45° (True).

Magnetic Convergence at surface is: -4.83° (2 August 2012, , BGGM2012)



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

Kansas
Corporation Commission

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

November 07, 2012

Damonica Pierson
Shell Gulf of Mexico Inc.
150 N DAIRY-ASHFORD (77079)
PO BOX 576 (77001-0576)
HOUSTON, TX 77001-0576

Re: ACO1
API 15-007-23853-01-00
Schupbach 3510 4-1H
NW/4 Sec.04-35S-10W
Barber County, Kansas

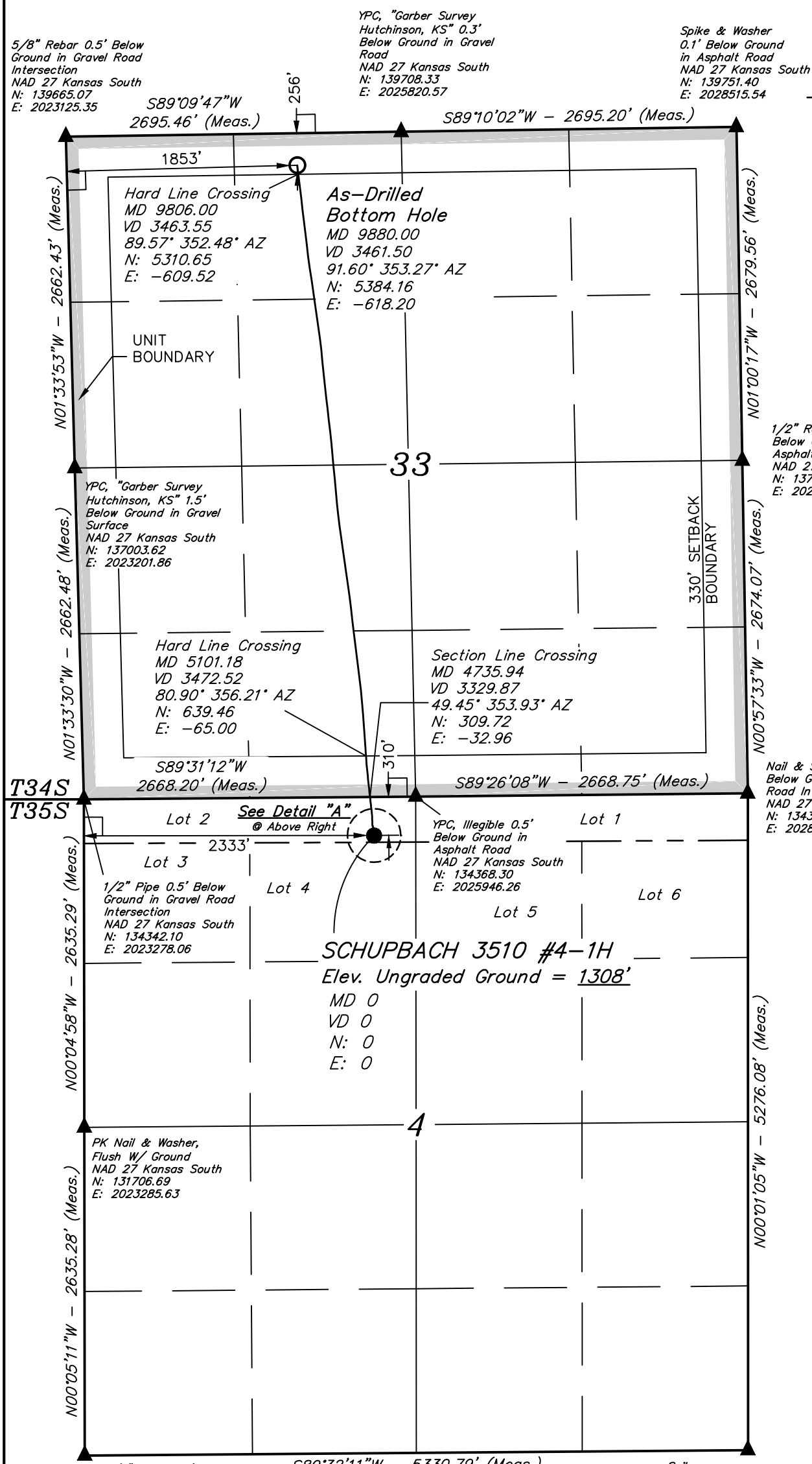
Dear Production Department:

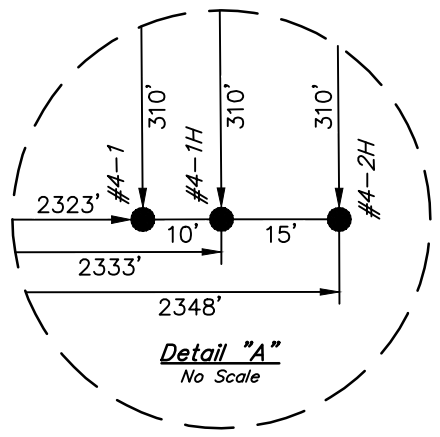
We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

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

Respectfully,
Damonica Pierson

T35S, R10W, 6th P.M.





SGOMI

Well location, SCHUPBACH 3510 #4–1H, located as shown in Lot 2 of Section 4, 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.

NAD 83 (#4–1H AS DRILLED BOTTOM HOLE)	NAD 83 (#4–1H SURFACE LOCATION)
LATITUDE = 37°02'58.59" (37.049608)	LATITUDE = 37°02'05.35" (37.034819)
LONGITUDE = 98°24'53.08" (98.414744)	LONGITUDE = 98°24'45.42" (98.412617)
NAD 27 (#4–1H AS DRILLED BOTTOM HOLE)	NAD 27 (#4–1H SURFACE LOCATION)
LATITUDE = 37°02'58.49" (37.049581)	LATITUDE = 37°02'05.26" (37.034794)
LONGITUDE = 98°24'51.81" (98.414392)	LONGITUDE = 98°24'44.15" (98.412264)
STATE PLANE NAD 27 (KANSAS SOUTH)	STATE PLANE NAD 27 (KANSAS SOUTH)
N: 139438.52 E: 2024985.84	N: 134055.00 E: 2025611.76

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 L. CRUMO 161451 REGISTERED LAND SURVEYOR STATE OF KANSAS

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161451
STATE OF KANSAS
10–29–12

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	09–21–12	10–25–12
PARTY: D.S. K.S. C.A.G.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: SGOMI	