Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1090360

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: Jack Grow
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 #:

03/22/2012	05/06/2012	07/23/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-077-21823-01-00
Spot Description:
SW SE SE SW Sec. 27 Twp. 34 S. R. 7 ☐ East ☑ West
0 Feet from ☐ North / ☑ South Line of Section
2024 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: Harper
Lease Name: Davis 3407 Well #: 27-1H
Field Name:
Producing Formation: Mississippi
Elevation: Ground: 1405 Kelly Bushing: 1426
Total Vertical Depth: 9390 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 801 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 No. 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: 08/13/2012
☑ **Confidential Release Date:** 08/13/2014
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** Deanna Garrison **Date:** 08/21/2012

[redacted] 1090360

Operator Name: Shell Gulf of Mexico Inc. Lease Name: Davis 3407 Well #: 27-1H

Sec. 27 Twp. 34 S. R. 7 ☐ East ☑ West County: Harper

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
Stalnaker Base	3982	
Iola	4208	
Hushpuckney	4382	
Marmaton	4485	
Pawnee	4572	
Cherokee	4625	
Mississippi	4811	

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: ☑ 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: 5887 – 9287

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	Davis 3407 27-1H
Doc ID	1090360

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
1	P-Sleeve 10	0 gals fluid & 0# proppant	9287
1	P-Sleeve 9	202314 gals fluid, 105467# proppant	8862
1	P-Sleeve 8	183666 gals fluid, 105488# proppant	8739
1	P-Sleeve 7	175056 gals fluid, 103341# proppant	8050
1	P-Sleeve 6	160104 gals fluid, 100546# proppant	7629
1	P-Sleeve 5	206850 gals fluid, 106349# proppant	7236
1	P-Sleeve 4	183918 gals fluid, 103659# proppant	6853
1	P-Sleeve 3	167160 gals fluid, 112281# proppant	6426
1	P-Sleeve 2	116634 gals fluid, 116634# proppant	6002
1	P-Sleeve 1	170814 gals fluid, 105521# proppant	5887

Form	ACO1 - Well Completion
Operator	Shell Gulf of Mexico Inc.
Well Name	Davis 3407 27-1H
Doc ID	1090360

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	47.44	60	1/2 Portland Cmt	42	15% Fly Ash
Surface	12.25	9.625	36	801	Class C	500	See attached
Intermediate	8.75	7	23	5377	Class C	990	See attached
Liner	6.125	4.5	11.6	9368	N/A	0	

CEMENT JOB REPORT

BAKER HUGHES

CUSTOMER	DATE	F.R. #	SERV. SUPV.
SHELL WESTERN E & P INC	23-MAR-12	1001897133	~~GREGORY S WRIGHT~~ Jonathan Schulz
LEASE & WELL NAME	**LOCATION**		**COUNTY-PARISH-BLOCK**
DAVIS 3407 27-1H - API 15077218230100			Harper 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
Fresh Water			8.34				20	
Class C + 2% CaCl + .25pps Celloflake + 0.01% stat		500	14.8	1.35	6.34	02:45	120.2	75.47
Fresh Water			8.34				59	
						TOTAL	199.2	75.47

Available Mix Water 400 Bbl. Available Displ. Fluid 305 Bbl.

HOLE SIZE	% EXCESS	DEPTH	TBG-CSG-D.P. ID	OD	WGT.	TYPE	MD	TVD	GRADE	COLLAR DEPTHS SHOE	FLOAT	STAGE
12.25		820	8.921	9.625	36	CSG	801	801	J-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	FRESH WATER	8.34

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
58.3	BBLS	Fresh Water	8.34	255					3568	2000	Frac tank

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: Arrive on location @ 1730, Still making hole, Pulling drill pipe, 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 3850 PSI
						CIRCULATING WELL - RIG [X] BJ [ ]
17:30						Arrive on Location on 3/23/2012
14:18	109		3.8	5	WATER	load pumps & lines
14:21	3850				WATER	pressure test lines
14:26	177		2.8		WATER	open well/start water ahead
14:33	56		2.8	20	WATER	end water ahead start slurry @ 14.8ppg
14:50	123		3.8	62	SLURRY	bbls pumped when slurry @ shoe
15:07	50		3.4	120	SLURRY	end slurry/ shutdown
15:09	29		2.8		WATER	drop TRP/ start displacement
15:12	102		2.8	5	WATER	bbls of displacment pumped when cement to surface
15:26	145		2.8	59	WATER	bbls pumped/ shutdown/ no bump
11:30	130					Check float/ holding
						50bbls 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:
Y [N]	207	[Y] N	50	205	0	Y [N]	Jonathan Schulz

CEMENT JOB REPORT

CUSTOMER	DATE	F.R. #	SERV. SUPV.
SHELL WESTERN E & P INC	25-APR-12	1001903972	JUSTIN D STAMPER
LEASE & WELL NAME	**LOCATION**		**COUNTY-PARISH-BLOCK**
DAVIS 3407 #27-1H - API 15077218230000	27-34S-7W		Harper Kansas
DISTRICT	**DRILLING CONTRACTOR RIG #**		**TYPE OF JOB**
McAlester			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			8.35				40	
15:85:8(POZ,C,GEL)+10%SALT+.5%SMS+4PPS KOLS		790	12.4	2.45	13.5	04:18	345	254.14
50:50:2(POZ,C,GEL)+4#KOLSL+.15%SMS+.3%FL52		200	14.2	1.32	5.66	02:35	47	26.94
WATER			8.34				210	

Available Mix Water 1000 **Bbl.** **Available Displ. Fluid** 1000 **Bbl.** **TOTAL** 642 281.08

HOLE SIZE	% EXCESS	DEPTH	TBG-CSG-D.P. ID	OD	WGT.	TYPE	MD	TVD	GRADE	COLLAR DEPTHS SHOE	FLOAT	STAGE
8.75		5386	6.366	7	23	CSG	5377	5377	L-80	5377	5332	

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
210.5	BBLS	WATER	8.34	1100					5072	3000	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 5500 PSI
						CIRCULATING WELL - RIG [X] BJ [ ]
04:30						ARRIVE ON LOCATION
12:00						SAFETY MEETING
13:30	5500				WATER	TEST LINES, RIG PUMP SPACER, START LEAD SLURRY
15:28	130		3	345	LEAD	FINISH LEAD, START TAIL SLURRY
15:39	150		3	47	TAIL	FINISH TAIL SLURRY, SHUT DOWN DROP PLUG AND DISPLACE
16:36	1300		3.7	200	WATER	SLOW TO BUMP PLUG
16:41	1100		2	10	WATER	SHUT DOWN, DID NOT BUMP, CHECK FLOAT
						RECIVED .5 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]	0	[Y] N	0	583	0	[Y] N	

Shell Exploration & Production Co. Inc.

Harper Co. (NAD-27)
Sec 34-T34S-R07W
Davis 3407 27-1H/ Job# 9342167/ Nab 180

Wellbore #1

Design: Wellbore #1

Sperry Drilling Services

Combo Report With Grid North & True North

10 May, 2012

Well Coordinates: 140,195.55 N, 2,126,369.90 E (37° 03' 03.19" N, 098° 04' 01.26" W)
Ground Level: 1,402.00 ft

Local Coordinate Origin:	Centered on Well Davis 3407 27-1H/ Job# 9342167/ Nab 180
Viewing Datum:	WELL @ 1425.80ft (Original Well Elev)
TVDs to System:	N
North Reference:	True
Unit System:	API-US New

Version: 2003.21 Build: 43

HALLIBURTON

Design Report for Davis 3407 27-1H/ Job# 9342167/ Nab 180 - Wellbore #1

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	True 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	359.73	0.00	-1,425.80	0.00	0.00 N	0.00 E	140,195.55	2,126,369.90	0.00	0.00	
142.00	0.37	72.90	73.17	-1,283.80	142.00	0.13 N	0.44 E	140,195.68	2,126,370.34	0.26	0.44	First MWD Survey
235.00	0.25	65.94	66.21	-1,190.80	235.00	0.30 N	0.91 E	140,195.86	2,126,370.82	0.14	0.94	
332.00	0.41	48.83	49.10	-1,093.80	332.00	0.61 N	1.37 E	140,196.17	2,126,371.27	0.19	1.49	
426.00	0.36	61.00	61.27	-999.81	425.99	0.98 N	1.88 E	140,196.54	2,126,371.78	0.10	2.11	
519.00	0.31	42.68	42.95	-906.81	518.99	1.30 N	2.31 E	140,196.86	2,126,372.21	0.13	2.65	
612.00	0.34	60.30	60.57	-813.81	611.99	1.62 N	2.72 E	140,197.18	2,126,372.62	0.11	3.17	
705.00	0.04	41.32	41.59	-720.81	704.99	1.78 N	2.98 E	140,197.34	2,126,372.88	0.33	3.47	
755.00	0.12	21.44	21.71	-670.81	754.99	1.84 N	3.01 E	140,197.41	2,126,372.91	0.17	3.53	
890.00	0.00	59.82	60.09	-535.81	889.99	1.97 N	3.07 E	140,197.54	2,126,372.96	0.09	3.64	
983.00	0.22	49.71	49.98	-442.81	982.99	2.09 N	3.20 E	140,197.65	2,126,373.10	0.24	3.82	
1,077.00	0.18	354.11	354.38	-348.81	1,076.99	2.35 N	3.33 E	140,197.92	2,126,373.22	0.20	4.06	
1,170.00	0.50	235.23	235.50	-255.81	1,169.99	2.27 N	2.98 E	140,197.83	2,126,372.87	0.65	3.72	
1,263.00	0.64	181.20	181.47	-162.82	1,262.98	1.52 N	2.63 E	140,197.08	2,126,372.53	0.57	3.04	
1,358.00	0.28	158.46	158.73	-67.82	1,357.98	0.77 N	2.70 E	140,196.33	2,126,372.60	0.42	2.71	
1,453.00	0.26	199.72	199.99	27.18	1,452.98	0.35 N	2.71 E	140,195.91	2,126,372.61	0.20	2.50	
1,548.00	0.56	175.53	175.80	122.18	1,547.98	0.31 S	2.67 E	140,195.25	2,126,372.58	0.36	2.12	
1,738.00	0.14	86.64	86.91	312.17	1,737.97	1.23 S	2.97 E	140,194.34	2,126,372.88	0.30	1.89	
1,928.00	0.28	139.87	140.14	502.17	1,927.97	1.57 S	3.50 E	140,194.00	2,126,373.41	0.12	2.17	
2,118.00	0.43	93.55	93.82	692.17	2,117.97	1.97 S	4.51 E	140,193.60	2,126,374.42	0.16	2.82	
2,307.00	0.43	156.67	156.94	881.17	2,306.97	2.67 S	5.49 E	140,192.90	2,126,375.41	0.24	3.29	
2,497.00	0.57	113.15	113.42	1,071.16	2,496.96	3.71 S	6.64 E	140,191.87	2,126,376.56	0.21	3.73	
2,687.00	0.96	83.33	83.60	1,261.14	2,686.94	3.90 S	9.09 E	140,191.69	2,126,379.01	0.29	5.72	
2,877.00	0.34	66.40	66.67	1,451.13	2,876.93	3.50 S	11.19 E	140,192.10	2,126,381.11	0.34	7.72	
2,972.00	0.29	108.94	109.21	1,546.13	2,971.93	3.47 S	11.68 E	140,192.13	2,126,381.60	0.25	8.15	
3,162.00	0.52	278.13	278.40	1,736.13	3,161.93	3.50 S	11.28 E	140,192.10	2,126,381.20	0.42	7.79	
3,352.00	0.63	23.21	23.48	1,926.12	3,351.92	2.42 S	10.84 E	140,193.18	2,126,380.76	0.48	7.99	
3,542.00	0.71	355.45	355.72	2,116.11	3,541.91	0.29 S	11.17 E	140,195.31	2,126,381.07	0.17	9.38	
3,731.00	0.57	4.01	4.28	2,305.10	3,730.90	1.82 N	11.15 E	140,197.42	2,126,381.05	0.09	10.46	
3,921.00	0.35	352.18	352.45	2,495.09	3,920.89	3.34 N	11.14 E	140,198.94	2,126,381.03	0.13	11.25	
3,953.00	0.33	30.05	30.32	2,527.09	3,952.89	3.51 N	11.18 E	140,199.11	2,126,381.07	0.69	11.37	
4,015.00	0.47	179.33	179.60	2,589.09	4,014.89	3.41 N	11.27 E	140,199.01	2,126,381.16	1.25	11.40	
4,047.00	2.35	179.57	179.84	2,621.08	4,046.88	2.62 N	11.27 E	140,198.23	2,126,381.17	5.88	10.99	
4,078.00	5.04	174.12	174.39	2,652.01	4,077.81	0.63 N	11.41 E	140,196.24	2,126,381.31	8.74	10.06	
4,110.00	7.38	173.15	173.42	2,683.82	4,109.62	2.81 S	11.78 E	140,192.80	2,126,381.70	7.32	8.59	
4,141.00	9.90	172.90	173.17	2,714.47	4,140.27	7.43 S	12.33 E	140,188.18	2,126,382.27	8.13	6.64	
4,173.00	12.31	173.06	173.33	2,745.86	4,171.66	13.55 S	13.05 E	140,182.06	2,126,383.02	7.53	4.06	

Design Report for Davis 3407 27-1H/ Job# 9342167/ Nab 180 - Wellbore #1

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	True 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
4,205.00	14.90	174.60	174.87	2,776.96	4,202.76	21.04 S	13.81 E	140,174.57	2,126,383.82	8.17	0.81	
4,236.00	17.81	176.41	176.68	2,806.71	4,232.51	29.74 S	14.45 E	140,165.87	2,126,384.49	9.53	-3.19	
4,268.00	19.65	177.49	177.76	2,837.01	4,262.81	40.01 S	14.94 E	140,155.61	2,126,385.03	5.85	-8.12	
4,300.00	21.84	178.58	178.85	2,866.93	4,292.73	51.34 S	15.27 E	140,144.29	2,126,385.41	6.95	-13.75	
4,331.00	24.14	178.83	179.10	2,895.47	4,321.27	63.44 S	15.48 E	140,132.18	2,126,385.68	7.43	-19.88	
4,363.00	26.24	178.94	179.21	2,924.43	4,350.23	77.06 S	15.68 E	140,118.57	2,126,385.95	6.56	-26.81	
4,394.00	28.44	176.84	177.11	2,951.96	4,377.76	91.28 S	16.15 E	140,104.34	2,126,386.48	7.75	-33.83	
4,425.00	30.05	175.82	176.09	2,979.01	4,404.81	106.40 S	17.05 E	140,089.23	2,126,387.45	5.44	-40.95	
4,457.00	32.09	173.46	173.73	3,006.42	4,432.22	122.85 S	18.53 E	140,072.79	2,126,389.00	7.42	-48.27	
4,489.00	34.42	174.37	174.64	3,033.18	4,458.98	140.30 S	20.30 E	140,055.34	2,126,390.86	7.45	-55.86	
4,520.00	37.89	174.86	175.13	3,058.20	4,484.00	158.52 S	21.93 E	140,037.14	2,126,392.57	11.23	-63.97	
4,552.00	41.37	174.32	174.59	3,082.84	4,508.64	178.84 S	23.76 E	140,016.82	2,126,394.49	10.93	-73.01	
4,583.00	44.16	175.25	175.52	3,105.60	4,531.40	199.81 S	25.57 E	139,995.86	2,126,396.40	9.23	-82.41	
4,615.00	45.16	174.83	175.10	3,128.36	4,554.16	222.23 S	27.41 E	139,973.45	2,126,398.35	3.26	-92.53	
4,647.00	46.63	175.62	175.89	3,150.63	4,576.43	245.13 S	29.21 E	139,950.56	2,126,400.25	4.92	-102.94	
4,678.00	48.00	175.77	176.04	3,171.65	4,597.45	267.86 S	30.82 E	139,927.83	2,126,401.96	4.43	-113.43	
4,710.00	50.63	177.44	177.71	3,192.51	4,618.31	292.09 S	32.13 E	139,903.61	2,126,403.39	9.12	-124.94	
4,741.00	53.14	178.03	178.30	3,211.64	4,637.44	316.46 S	32.98 E	139,879.24	2,126,404.35	8.23	-136.93	
4,773.00	55.20	177.89	178.16	3,230.37	4,656.17	342.39 S	33.78 E	139,853.32	2,126,405.27	6.45	-149.77	
4,805.00	57.60	177.72	177.99	3,248.08	4,673.88	369.03 S	34.68 E	139,826.69	2,126,406.29	7.51	-162.90	
4,836.00	58.18	177.73	178.00	3,264.56	4,690.36	395.27 S	35.59 E	139,800.45	2,126,407.33	1.87	-175.81	Start of Tangent
4,868.00	58.69	177.21	177.48	3,281.31	4,707.11	422.52 S	36.67 E	139,773.21	2,126,408.54	2.11	-189.10	
4,900.00	59.41	176.72	176.99	3,297.77	4,723.57	449.93 S	37.99 E	139,745.80	2,126,409.99	2.61	-202.27	
4,931.00	60.39	176.47	176.74	3,313.31	4,739.11	476.71 S	39.46 E	139,719.03	2,126,411.58	3.24	-214.98	
4,963.00	61.50	175.93	176.20	3,328.85	4,754.65	504.63 S	41.18 E	139,691.12	2,126,413.43	3.77	-228.08	
4,995.00	62.63	175.36	175.63	3,343.85	4,769.65	532.82 S	43.20 E	139,662.93	2,126,415.58	3.87	-241.07	End of Tangent
5,026.00	64.68	173.49	173.76	3,357.60	4,783.40	560.48 S	45.77 E	139,635.29	2,126,418.28	8.54	-253.30	
5,058.00	67.45	172.63	172.90	3,370.58	4,796.38	589.53 S	49.17 E	139,606.26	2,126,421.81	9.00	-265.55	
5,090.00	71.52	171.98	172.25	3,381.80	4,807.60	619.24 S	53.04 E	139,576.56	2,126,425.82	12.86	-277.74	
5,121.00	74.53	173.91	174.18	3,390.85	4,816.65	648.68 S	56.54 E	139,547.14	2,126,429.46	11.39	-290.11	
5,153.00	77.12	175.40	175.67	3,398.68	4,824.48	679.58 S	59.28 E	139,516.25	2,126,432.34	9.27	-303.89	
5,185.00	78.18	175.10	175.37	3,405.53	4,831.33	710.74 S	61.73 E	139,485.10	2,126,434.93	3.44	-318.06	
5,216.00	78.75	174.97	175.24	3,411.73	4,837.53	741.01 S	64.21 E	139,454.84	2,126,437.56	1.88	-331.73	
5,248.00	79.57	174.13	174.40	3,417.74	4,843.54	772.31 S	67.05 E	139,423.56	2,126,440.54	3.64	-345.63	
5,280.00	82.74	174.33	174.60	3,422.66	4,848.46	803.78 S	70.08 E	139,392.10	2,126,443.72	9.93	-359.46	
5,311.00	85.02	174.67	174.94	3,425.97	4,851.77	834.48 S	72.89 E	139,361.42	2,126,446.67	7.44	-373.08	
5,403.00	88.03	175.92	176.19	3,431.54	4,857.34	926.02 S	79.99 E	139,269.91	2,126,454.19	3.54	-414.77	

Design Report for Davis 3407 27-1H/ Job# 9342167/ Nab 180 - Wellbore #1

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	True 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
5,435.00	88.95	175.91	176.18	3,432.39	4,858.19	957.94 S	82.12 E	139,238.00	2,126,456.47	2.88	-429.60	
5,528.00	87.90	175.47	175.74	3,434.94	4,860.74	1,050.67 S	88.67 E	139,145.30	2,126,463.45	1.22	-472.38	
5,621.00	89.04	174.41	174.68	3,437.43	4,863.23	1,143.31 S	96.43 E	139,052.70	2,126,471.64	1.67	-514.08	
5,715.00	88.05	173.51	173.78	3,439.81	4,865.61	1,236.80 S	105.88 E	138,959.26	2,126,481.52	1.42	-554.79	
5,808.00	88.12	172.09	172.36	3,442.92	4,868.72	1,329.07 S	117.09 E	138,867.04	2,126,493.17	1.53	-593.34	
5,901.00	89.91	172.20	172.47	3,444.52	4,870.32	1,421.24 S	129.36 E	138,774.93	2,126,505.87	1.93	-630.95	
5,963.00	90.22	172.99	173.26	3,444.45	4,870.25	1,482.76 S	137.06 E	138,713.45	2,126,513.85	1.37	-656.47	
6,057.00	89.57	173.13	173.40	3,444.62	4,870.42	1,576.12 S	147.98 E	138,620.14	2,126,525.20	0.71	-695.85	
6,149.00	89.05	174.22	174.49	3,445.73	4,871.53	1,667.60 S	157.69 E	138,528.71	2,126,535.33	1.31	-735.29	
6,243.00	90.92	174.33	174.60	3,445.75	4,871.55	1,761.17 S	166.62 E	138,435.18	2,126,544.70	1.99	-776.47	
6,336.00	85.89	176.02	176.29	3,448.34	4,874.14	1,853.81 S	174.00 E	138,342.58	2,126,552.51	5.71	-818.49	
6,429.00	87.72	175.53	175.80	3,453.53	4,879.33	1,946.44 S	180.41 E	138,249.98	2,126,559.35	2.04	-861.34	
6,524.00	90.43	175.73	176.00	3,455.06	4,880.86	2,041.17 S	187.20 E	138,155.27	2,126,566.58	2.86	-904.96	
6,619.00	90.96	176.93	177.20	3,453.91	4,879.71	2,136.00 S	192.83 E	138,060.48	2,126,572.65	1.38	-949.61	
6,713.00	90.37	176.87	177.14	3,452.82	4,878.62	2,229.87 S	197.47 E	137,966.62	2,126,577.73	0.63	-994.62	
6,807.00	88.00	178.98	179.25	3,454.15	4,879.95	2,323.81 S	200.43 E	137,872.70	2,126,581.13	3.38	-1,041.09	
6,902.00	88.24	178.84	179.11	3,457.27	4,883.07	2,418.74 S	201.79 E	137,777.77	2,126,582.93	0.29	-1,089.45	
6,997.00	90.77	178.42	178.69	3,458.09	4,883.89	2,513.72 S	203.62 E	137,682.81	2,126,585.19	2.70	-1,137.43	
7,092.00	87.66	177.55	177.82	3,459.39	4,885.19	2,608.65 S	206.51 E	137,587.89	2,126,588.52	3.40	-1,184.48	
7,186.00	89.41	177.82	178.09	3,461.79	4,887.59	2,702.56 S	209.86 E	137,494.00	2,126,592.31	1.88	-1,230.60	
7,281.00	88.52	178.43	178.70	3,463.51	4,889.31	2,797.50 S	212.52 E	137,399.07	2,126,595.42	1.14	-1,277.86	
7,376.00	88.73	177.92	178.19	3,465.79	4,891.59	2,892.44 S	215.10 E	137,304.15	2,126,598.43	0.58	-1,325.18	
7,471.00	89.02	177.96	178.23	3,467.66	4,893.46	2,987.37 S	218.07 E	137,209.23	2,126,601.84	0.31	-1,372.17	
7,566.00	89.69	177.30	177.57	3,468.73	4,894.53	3,082.30 S	221.55 E	137,114.31	2,126,605.76	0.99	-1,418.71	
7,661.00	88.55	176.74	177.01	3,470.18	4,895.98	3,177.18 S	226.04 E	137,019.46	2,126,610.69	1.34	-1,464.37	
7,756.00	89.44	175.95	176.22	3,471.85	4,897.65	3,272.00 S	231.65 E	136,924.67	2,126,616.74	1.25	-1,509.04	
7,851.00	91.17	175.48	175.75	3,471.34	4,897.14	3,366.76 S	238.30 E	136,829.94	2,126,623.83	1.89	-1,552.79	
7,946.00	90.22	176.46	176.73	3,470.19	4,895.99	3,461.55 S	244.53 E	136,735.18	2,126,630.50	1.44	-1,596.92	
8,041.00	91.69	176.51	176.78	3,468.61	4,894.41	3,556.38 S	249.90 E	136,640.37	2,126,636.32	1.55	-1,641.80	
8,135.00	90.28	174.65	174.92	3,466.99	4,892.79	3,650.11 S	256.70 E	136,546.67	2,126,643.56	2.48	-1,684.89	
8,230.00	89.66	175.75	176.02	3,467.04	4,892.84	3,744.82 S	264.21 E	136,452.01	2,126,651.50	1.33	-1,727.88	
8,325.00	89.66	176.78	177.05	3,467.61	4,893.41	3,839.64 S	269.95 E	136,357.21	2,126,657.68	1.08	-1,772.44	
8,420.00	87.60	176.10	176.37	3,469.88	4,895.68	3,934.45 S	275.40 E	136,262.43	2,126,663.57	2.28	-1,817.25	
8,515.00	92.66	177.89	178.16	3,469.66	4,895.46	4,029.31 S	279.93 E	136,167.59	2,126,668.54	5.65	-1,862.86	
8,609.00	85.12	176.74	177.01	3,471.48	4,897.28	4,123.14 S	283.89 E	136,073.78	2,126,672.94	8.11	-1,908.42	
8,704.00	86.39	176.38	176.65	3,478.51	4,904.31	4,217.73 S	289.13 E	135,979.22	2,126,678.61	1.39	-1,953.29	
8,799.00	89.88	174.37	174.64	3,481.61	4,907.41	4,312.38 S	296.34 E	135,884.60	2,126,686.26	4.24	-1,996.51	

Design Report for Davis 3407 27-1H/ Job# 9342167/ Nab 180 - Wellbore #1

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	True 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
8,894.00	88.95	174.75	175.02	3,482.58	4,908.38	4,406.99 S	304.90 E	135,790.03	2,126,695.26	1.06	-2,038.56	
8,989.00	90.12	175.88	176.15	3,483.35	4,909.15	4,501.70 S	312.21 E	135,695.35	2,126,703.01	1.71	-2,081.72	
9,084.00	88.74	175.44	175.71	3,484.29	4,910.09	4,596.46 S	318.95 E	135,600.63	2,126,710.20	1.52	-2,125.39	
9,179.00	87.59	174.50	174.77	3,487.33	4,913.13	4,691.08 S	326.83 E	135,506.05	2,126,718.52	1.56	-2,168.02	
9,274.00	90.46	174.05	174.32	3,488.95	4,914.75	4,785.62 S	335.86 E	135,411.55	2,126,727.98	3.06	-2,209.64	
9,334.00	89.41	172.82	173.09	3,489.02	4,914.82	4,845.26 S	342.44 E	135,351.94	2,126,734.84	2.70	-2,235.13	Last MWD Survey
9,390.00	89.41	172.82	173.09	3,489.59	4,915.39	4,900.85 S	349.17 E	135,296.38	2,126,741.83	0.00	-2,258.38	Projection to TD

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
142.00	142.00	0.13	0.44	First MWD Survey
4,836.00	4,690.36	-395.27	35.59	Start of Tangent
4,995.00	4,769.65	-532.82	43.20	End of Tangent
9,334.00	4,914.82	-4,845.26	342.44	Last MWD Survey
9,390.00	4,915.39	-4,900.85	349.17	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)	58.56	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
142.00	9,390.00	MWD	MWD+SC

Design Targets

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

Design Report for Davis 3407 27-1H/ Job# 9342167/ Nab 180 - Wellbore #1

Directional Difficulty Index

Average Dogleg over Survey:	1.95 °/100ft	Maximum Dogleg over Survey:	12.86 °/100ft at 5,090.00 ft
Net Tortousity applicable to Plans:	0.98 °/100ft	Directional Difficulty Index:	6.239

Audit Info

North Reference Sheet for Sec 34-T34S-R07W - Davis 3407 27-1H/ Job# 9342167/ Nab 180 - Wellbore #1

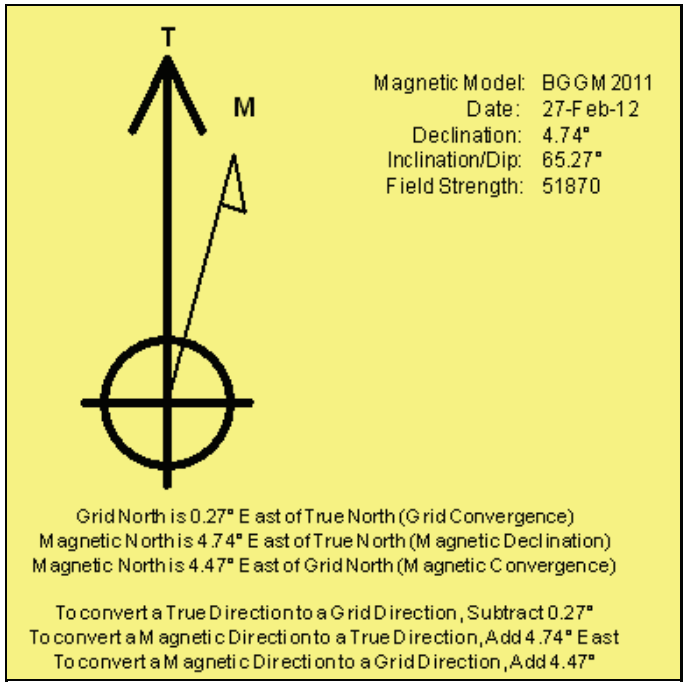
All data is in Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.
Vertical Depths are relative to WELL @ 1425.80ft (Original Well Elev). Northing and Easting are relative to Davis 3407 27-1H/ Job# 9342167/ Nab 180

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: 1.00004941

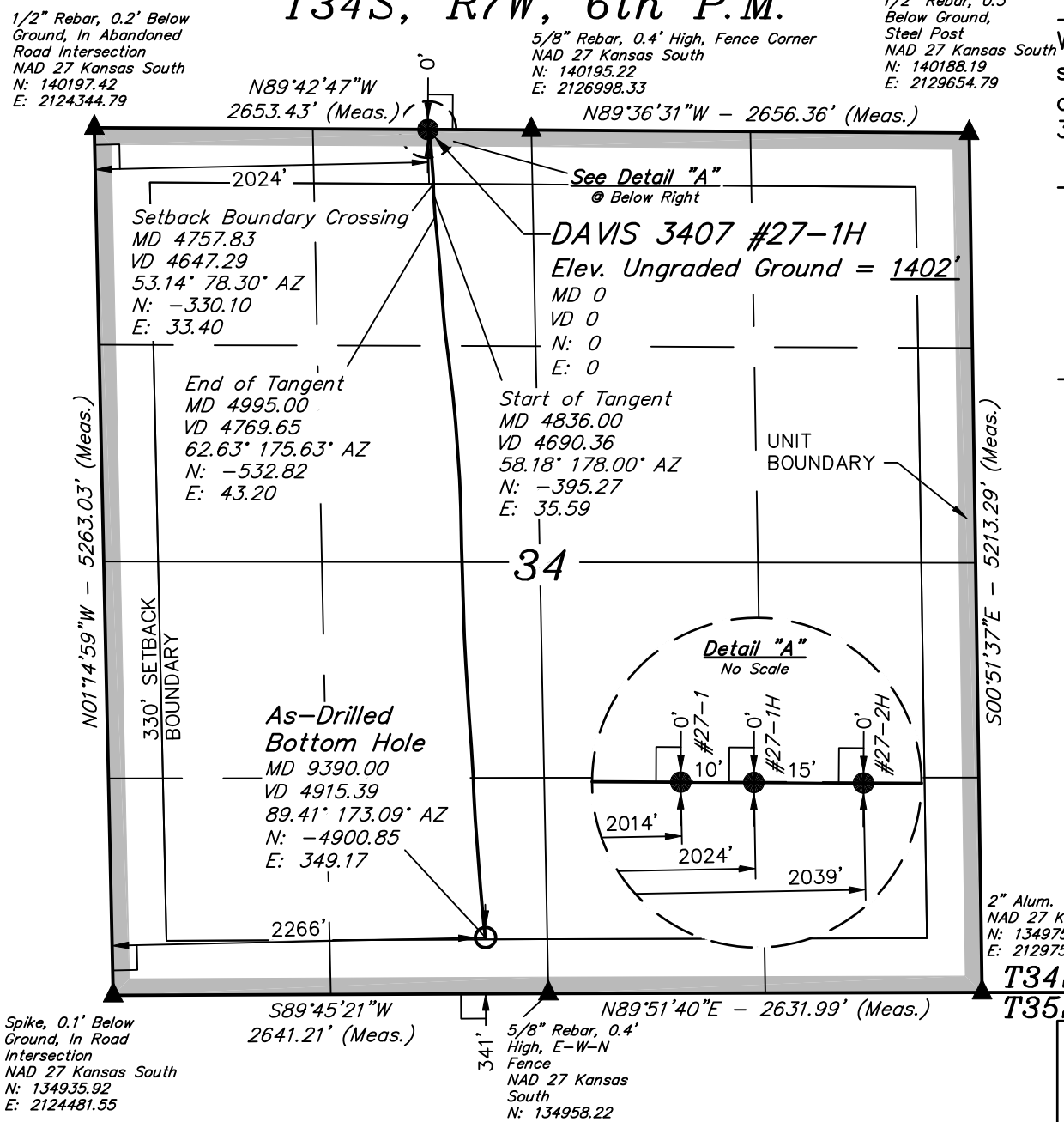
Grid Coordinates of Well: 140,195.55 ft N, 2,126,369.90 ft E
Geographical Coordinates of Well: 37° 03' 03.19" N, 098° 04' 01.26" W
Grid Convergence at Surface is: 0.27°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,390.00ft
the Bottom Hole Displacement is 4,913.27ft in the Direction of 175.92° (True).

Magnetic Convergence at surface is: -4.47° (27 February 2012, , BGGM2011)



T34S, R7W, 6th P.M.



SGOMI

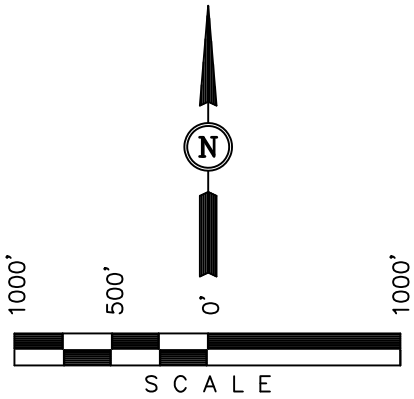
Well location, DAVIS 3407 #27-1H, located as shown on the Line Between the SE 1/4 SW 1/4 of Section 27 and the NE 1/4 NW 1/4 of section 34, T34S, R7W, 6th P.M., Harper County, Kansas.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHEAST CORNER OF SECTION 22, T33S, R7W, 6th P.M. TAKEN FROM THE ANTHONY, QUADRANGLE, KANSAS, HARPER COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 1348 FEET.

BASIS OF BEARINGS

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



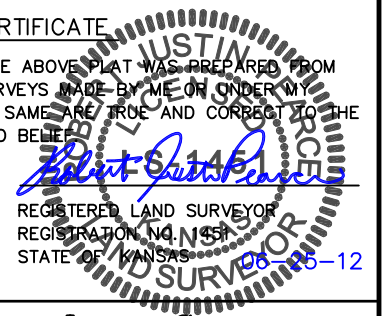
CERTIFICATE

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.

Robert L. Kay 161319

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF KANSAS

06-25-12



LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

NAD 83 (AS-DRILLED BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 37°02'14.82" (37.037450)	LATITUDE = 37°03'03.28" (37.050911)
LONGITUDE = 98°03'58.21" (98.066169)	LONGITUDE = 98°04'02.49" (98.067358)
NAD 27 (AS-DRILLED BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 37°02'14.73" (37.037425)	LATITUDE = 37°03'03.19" (37.050886)
LONGITUDE = 98°03'56.98" (98.065828)	LONGITUDE = 98°04'01.26" (98.067017)
STATE PLANE NAD 27 (KANSAS SOUTH)	STATE PLANE NAD 27 (KANSAS SOUTH)
N: 135296.09 E: 2126739.54	N: 140195.66 E: 2126369.90

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

SCALE: 1" = 1000'	DATE SURVEYED: 11-05-11	DATE DRAWN: 06-22-12
PARTY: L.S. K.H. C.C.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: SGOMI	

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/

August 13, 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 15-077-21823-01-00
Davis 3407 27-1H
SW/4 Sec.27-34S-07W
Harper 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