

The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 3011367	Quote #:	Sales Order #: 900609538
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: ..., Louise	
Well Name: Savolts 2033	Well #: 1-27	API/UWI #: 15-171-20961	
Field:	City (SAP): SCOTT CITY	County/Parish: Scott	State: Kansas
Legal Description: Section 27 Township 20S Range 33W			
Contractor: TOM CAT		Rig/Platform Name/Num: 3	
Job Purpose: Cement Production Casing			
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: FRENCH, JEREMY		Srvc Supervisor: RODRIGUEZ, EDGAR MBU ID Emp #: 442125	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BERUMEN, EDUARDO	11	267804	DOSEN, DUSTIN	11	543153	RAMIREZ, JORGE M.	11	498481
RODRIGUEZ, EDGAR Alejandro	11	442125						

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
7/25/2013	5	1	7/26/2013	6	2.5			

TOTAL Total is the sum of each column separately

### Job

### Job Times

Formation Name	Date	Time	Time Zone
Formation Depth (MD) Top	Called Out	25 - Jul - 2013	12:00 CST
Formation Depth (MD) Bottom	On Location	25 - Jul - 2013	17:00 CST
Form Type	Job Started	26 - Jul - 2013	03:24 CST
Job depth MD	Job Completed	26 - Jul - 2013	04:41 CST
Water Depth	Departed Loc	26 - Jul - 2013	06:10 CST
Perforation Depth (MD) From			
Perforation Depth (MD) To			

### Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
7.875" Open Hole				7.875				1825.	5050.		
5.5" Production Casing	Unknown		5.5	4.	17.	LTC	J-55	.	5050.		
8.625" Surface Casing	Unknown		8.625	7.921	32.	STC	J-55	.	1825.		

### Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP PLSTC,5 1/2 13-23PPF,4.49	1	EA		

### Tools and Accessories

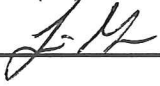
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	5 1/2	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	5 1/2	1	HES
Stage Tool										Centralizers			

### Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

### Fluid Data

Stage/Plug #: 1
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Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Rig Supplied Gel Spacer		30.00	bbl	8.5	.0	.0	.0	
2	Lead Cement	ECONOCEM (TM) SYSTEM (452992)	180.0	sacks	12.	2.23	12.4		12.4
	0.2 %	HR-800, 50 LB SACK (101619742)							
	3 %	CAL-SEAL 60, 50 LB BAG (101217146)							
	6 %	BENTONITE, BULK (100003682)							
	0.1 %	WG-17, 50 LB SK (100003623)							
	12.395 Gal	FRESH WATER							
3	Tail Cement	ECONOCEM (TM) SYSTEM (452992)	250.0	sacks	13.6	1.48	7.13		7.13
	0.25 %	SA-1015, 50 LB SACK (102077046)							
	0.2 %	CFR-3, W/O DEFOAMER, 50 LB SK (100003653)							
	7.128 Gal	FRESH WATER							
4	Displacement		117.00	bbl	8.33	.0	.0	.0	
<b>Calculated Values</b>		<b>Pressures</b>			<b>Volumes</b>				
Displacement	117	Shut In: Instant		Lost Returns	NO	Cement Slurry	137	Pad	
Top Of Cement	701	5 Min		Cement Returns	NO	Actual Displacement	117	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	284
<b>Rates</b>									
Circulating	5	Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	46.25 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
<b>The Information Stated Herein Is Correct</b>				Customer Representative Signature 					



# ALLIED OIL & GAS SERVICES, LLC 060739

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:

Oakley  
7/20/13

DATE <u>7/19/13</u>	SEC. <u>27</u>	TWP. <u>20</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION	JOB START <u>7:00 Am</u>	JOB FINISH <u>8:00 Am</u>
LEASE <u>Savotts 2032</u>	WELL # <u>1-27</u>		LOCATION <u>Garden City 20 N To Rd 20</u>			COUNTY <u>Scott</u>	STATE <u>Ko.</u>
OLD OR NEW (Circle one) <u>NEW</u>			<u>2W - SW into</u>				

CONTRACTOR Tomcat #3

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 1840

CASING SIZE 8 7/8 DEPTH 1844

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT 42.0

CEMENT LEFT IN CSG. 42.0

PERFS. \_\_\_\_\_

DISPLACEMENT 114.78

EQUIPMENT

OWNER Same

CEMENT

AMOUNT ORDERED 475 SKs AMD  
150 SKs Com 3% Gel 2% Gel

COMMON 150 SKs @ \$17.90 = \$2685.00

POZMIX \_\_\_\_\_ @ \_\_\_\_\_

GEL 3 SKs @ \$23.40 = \$70.20

CHLORIDE 5 SKs @ \$64.00 = \$320.00

ASC \_\_\_\_\_ @ \_\_\_\_\_

AMD 475 SKs @ \$25.90 = \$12302.50

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

HANDLING 706.62 CF x @ \$2.48 = \$709.10

MILEAGE 31.96 x 50 x @ \$2.60 = \$4154.80

TOTAL \$20241.60

PUMP TRUCK CEMENTER Darren Paquette

# 120 HELPER Tyler Flipse

BULK TRUCK

# 566-595 DRIVER Brandon Wilkinson

BULK TRUCK

# 600 DRIVER Chris Helping stine

**REMARKS:**

m/x 475 SKs AMD Cement + 150 SKs  
Cement Displace with water  
Cement Dil Circulate  
Land Plug @ 1000' LIFT 500'  
50 SKs AMD 10 Pit  
25 SKs on Displacement  
Com 3+2 Fills 200'  
Thank You.

**SERVICE**

DEPTH OF JOB 1844'

PUMP TRUCK CHARGE \_\_\_\_\_ \$ 2213.75

EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_

MILEAGE 50 @ \$7.70 = \$385.00

MANIFOLD Head @ \$275.00

LV mileage @ \$4.90 = \$220.00

\_\_\_\_\_ @ \_\_\_\_\_

TOTAL \$3093.75

CHARGE TO: Tomcat Drly.

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

3 7/8 Weatherford

1-Rubber Plug @ \$131.04

1-Flapper Float Valve @ \$352.12

5-Centralizers @ \$74.88 = \$374.40

1-Basket @ \$559.76

1-Stop Collar @ \$86.16

\_\_\_\_\_ @ \_\_\_\_\_

TOTAL \$1473.52

To: Allied Oil & Gas Services, LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 24,808.38

DISCOUNT 5,209.75 IF PAID IN 30 DAYS

Bid 19,598.62 Net.

PRINTED NAME Michael Sanchez

SIGNATURE Michael Sanchez

Customer	SandRidge
Customer Acct #	
Well No.	Savolts #2033 1-27
Mailing Address	
City and State	
Zip Code	
Dispatch Location	BARTLESVILLE

County	Scott County, Kansas	Stage	1
Section	27	Formation	Cherokee
TWP	20S	TVD Perfs	4563-4567 4587-4592
RANGE	33W	MD Perfs	

START	1:43:39 PM
END	4:06:30 PM

WELL DATA						TRUCK#	DRIVER	TRUCK#	DRIVER
TREATMENT TYPE:	TREATMENT THROUGH TUBING IN CASING				PLUG DEPTH (FT)	588-T168	Ryan Jones		
TVD OF PERFS	4563' - 4592'	MD OF PERFS	4563' - 4592'	PACKER DEPTH (FT)		565	David Warren		
CASING SIZE (OD)	CASING WEIGHT	TMD TO TOP PERF(FT)	ID (INCHES)	DISPL COEF (BBL/FT)	VOLUME (BBLs)	688-T145	Dionne Ware		
5 1/2	J-55 (17 LBS)	4563	4.89	0.0232	106.0	580	Dale Wilson		
TUBING SIZE (IN)	TUBING WEIGHT	TMD TO BOTTOM OF TUBING(FT)				560-T123	Tony Monday		
2 7/8	J-55 (6.5 LBS)	4475	2.441	0.0058	25.9		Mark Cassel		
OVER FLUSH	0	DISPLACEMENT TO TOP PERF (BBLs)			25.9	575-T196	Mark Cassel		
						592-T156	John Bethel		
						546-T122	Shawn McAfee		

PERF DATA		CHEMICALS	
TOTAL HOLES SHOT		SR-445	116
HOLE ID (IN)		BIOSTAT 650	15
PHASING		15% HCL ACID (3RD PARTY DELIVERED)	6500
SPF		ACID INHIBITOR (AI-260)	7
		IRON CONTROL (SP-950)	13
		ACID RETARDER (AR-104)	58
EFFECTIVE HOLES		PLEXGEL 907L-EB	328

FET ANALYSIS (Optional)									
FLUID WEIGHT	8.34	MAX RATE:	10.8	MAX PRESSURE	2346	ISDP	460	FRAC GRAD	0.53
HYDROSTATIC HEIGHT	4563	RATE 1		PRESSURE 1		5 MIN SIP	419	FLUID EFF (%)	
FLUID SG	1.01	RATE 2		PRESSURE 2		10 MIN SIP	401	CALC PERM	
HYDROSTATIC PRESS	1978.88	RATE 3		PRESSURE 3		15 MN SIP	389		

PRESSURE DATA								
MAX PRESSURE	INITIAL PRESSURE	BREAKDOWN PRESSURE		ISIP	5 MIN	10 MIN	15 MIN	30 MIN
5500	0			460	419	401	389	

SUMMARY			
TOTAL FLUID PUMPED	1453 BBLs	MAX TREATING PRESSURE	2346 PSI
PROPPANT PUMPED	25032 LBS	MIN TREATING PRESSURE	395 PSI
MAX RATE	10.8 BBL/MIN	AVE TREATING PRESSURE	1,410
MIN RATE	3 BBL/MIN		
AVERAGE RATE	10.14590502		
FOAM QUALITY		FLUID WEIGHT	8.34
AMOUNT OF FOAM PUMPED		HYDROSTATIC HEIGHT	4563
TYPE OF FOAM		HYDROSTATIC PRESS	1,978.88
		FRAC GRADIENT	0.53
		PROP TYPE	30/50 WHITE SAND
		TOTAL PUMPED	25032 LBS
		ACID	6090 GAL
		TOTAL FLUID	1453 BBLs

STAGE	CLEAN BBLs	DESIGN	FLUID TYPE	PRESSURE	RATE	PROP AMOUNT	DESIGN	CONC	TYPE
1	13	20	30# Gelled Water	0-395	0-3.2	0.00		0.00	
2	12	12	15% HCL Acid	395-2346	3.2-10.6	0.00		0.00	
3	164	167	30# Gelled Water	2331-1026	10.7	0.00		0.00	
4	71	71	15% Gelled Acid	1105-2337	10.7	0.00		0.00	
5	163	167	30# Gelled Water	2330-1104	10.6	0.00		0.00	
6	62	71	15% Gelled Acid	1532-436	10.6-3.0	0.00		0.00	
7	164	167	20# Gelled Water	1771-1186	7.9-10.8	0.00		0.00	
8	163	167	20# Gelled Water	1193-1293	10.8	1711.50	1750 LBS	0.25	30/50 WHITE SAND
9	26	167	20# Gelled Water	1293-1885	10.6	546.00	3500 LBS	0.50	30/50 WHITE SAND
10	38	167	20# Gelled Water	2097-1743	10.3	0.00		0.00	
11	102	167	20# Gelled Water	1743-1197	10.5	2142.00	3500 LBS	0.50	30/50 WHITE SAND
12	167	167	20# Gelled Water	1239-1256	10.4	5260.50	5250 LBS	0.75	30/50 WHITE SAND
13	196	167	20# Gelled Water	1245-1200	10.4	8232.00	7000 LBS	1.00	30/50 WHITE SAND
14	85	83	20# Gelled Water	1218-1093	10.4	7140.00	7000 LBS	2.00	30/50 WHITE SAND
15	27	26	Treated Water	1092-1520	10.5	0.00		0.00	
16						0.00		0.00	

Remarks

Pressure tested to 6012 psi

Put 1119 psi on the backside before the start of the frac.

Took 9 bbls to load hole

Cut sand on the 0.5 ppg sand stage because pressure was coming up.